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THE PROGRESS OF THE WORLD.

November Topics and Events. The opening days of the present month of November bring to a focus a number of matters of political interest and of general public concern in the United States. Election day falls on November 3. The most important pending contest to be settled on that day is the great municipal election in the city of New York, about which Mr. Ervin Wardman, editor of the *New York Press*, writes with characteristic zest and insight in another part of this magazine. Several pending State elections, furthermore, are regarded as of much moment by the people immediately concerned, while their results are also awaited by politicians everywhere as likely to have some sort of bearing upon the great Presidential contest of next year. Among these State elections the one most interesting for political reasons is that in Ohio, where not only the governorship is at stake, but also the complexion of the Legislature which is to decide whether or not Senator Hanna is to have another term at Washington. The assembling in special session on Monday, November 9, of the new Congress is another public matter of no small consequence; but meanwhile there are other things going on that are not less important, and not less anxiously regarded than the result of the elections or the assembling and the achievements of the new Congress.

The Postal Investigation. The first of these that we care to mention is the virtual completion of the inquiry into the ramifications of fraud and corruption that has brought the Post Office Department into disgrace. No branch of the national public service comes so close to such a large number of people as the post-office system. In the very nature of its work this department of the Government calls especially for strict application of business methods and entire freedom from mere political favoritism.

The operation of the spoils system in a department which conducts the business of distributing for all the people their letters, their newspapers and periodicals, their small parcels, and their remittances of money is intolerable. It profoundly disturbs the public mind to discover that this great business is to any extent conducted loosely or irresponsibly, or that some of its most trusted and prominent officials have been active "grafters" and scoundrels. The investigation into alleged post-office scandals and abuses conducted at the President's instance, and with his constant support and backing by the Hon. J. L. Bristow, Fourth Assistant-Postmaster-General, was completed late last month. Its results were all embodied in a report wrought out with extreme care by Mr. Bristow, and duly placed in the hands of the President. Not much later than the first of November, and perhaps several days sooner, it was expected that this report in all its material parts would be given to the public by the President through the newspapers.

The Inquiry Practically Finished. It is to be said that in their investigation of the general work of the Post Office Department, the President and the heads of the postal service are confident that they have at least explored the whole of the general area of the criminal frauds and offenses. But although they have, so to speak, outlined the main shores of this sea of corruption, they are well aware that there may yet prove to be some unexplored bays and inlets. They are also aware that they have not yet altogether sounded the depths of the sea,—that is to say, they have gone as far as they can with the investigation, and with the endeavor to procure legal evidence where they have discovered moral certainty of guilt. But they know, on the other hand, that for the following up of certain



HON. J. L. BRISTOW.
(Fourth Assistant-Postmaster-General.)

as yet obscure and doubtful clews they will have to await the result of evidence procured in the actual trial of a number of the men already under indictment.

The President's Attitude Toward the "Rascals." An intelligent public would hardly need to be told that the President of the United States cannot himself indict men, nor can he, when they are brought to trial, convict and punish them. He cannot make himself responsible for the behavior of juries, for the efficiency of prosecuting attorneys, for the rulings of judges, nor for the award of sentences. We beg to assert, however, that President Roosevelt has up to this time, without fear or favor, without party bias, and without abatement of zeal, done everything in his power to find out the truth about these cases of wrongdoing in the postal service, and he has insisted that all the available machinery of the Government should be used for stamping out and bringing to punishment all wrongdoing. In some cases, the charges have been a direct or indirect embarrassment to men of considerable influence and standing in the Republican party, and it is

not to be denied that some of these men have endeavored to bring pressure to bear upon the President to have this or that offense mitigated, condoned, or wholly covered up. Those who really understand the character and qualities of President Roosevelt will not need to be told how he has dealt with every attempt thus to bring political influence to bear upon his performance of what he conceives to be his straightforward duty as the nation's chief executive.

Where Politics Comes In. But there are many people in this country who are in more or less doubt about President Roosevelt's character and qualities, and it is not at all unnatural that many politicians of the Democratic party should be on the alert, hoping to use these post-office scandals in next year's campaign as furnishing good ground for an attack upon the Roosevelt administration, and for a large resort to the campaign cry, "Turn the rascals out!" It is one thing to please all shades, grades, and classes of Republican politicians with a view to heightening the ardor with which President Roosevelt's nomination next year may be made unanimous, and it is quite another thing to hold the confidence of the masses of the voters so firmly as to make reasonably certain Mr. Roosevelt's election at the polls. It is very much easier for politicians to run a nominating convention than to carry an election. There are some politicians in certain great and so-called pivotal States who have intimated that if Mr. Roosevelt is not very careful to see that these post-office prosecutions do not drag certain men



THE MEN WITH THE SHOVELS TO MR. BRISTOW:
"Don't open it, Joe! Let's bury it."—From the *Oaks* (Chicago).

into the clutches of the law, he will be "knifed" and defeated at the polls. But, on the other hand, the best Republican newspapers, and the most disinterested and intelligent public opinion of the country, declare that if Mr. Roosevelt should show the slightest disposition to shield or spare any guilty man, he would not only imperil his own political future, but he would also do the Republican party the worst possible service. All of which seems obvious enough.

*A Sample
Roosevelt
Letter.*

Fortunately, there are some things about which President Roosevelt does not think it necessary either to parley or to be tender and considerate; and one of those things is common honesty. We will take the liberty to put on record an unpublished incident that may serve, once for all, to illustrate exactly the way Mr. Roosevelt has been dealing with all cases of a similar nature. One day, last month, a certain Congressman visited him in the interest of a well-known man prominent in State politics but not in the Government employ, whose relations to certain postal contracts were such that there seemed imminent danger of his being indicted for conspiracy or bribery, or both. Not content with a verbal explanation of his attitude toward the business, President Roosevelt followed up the interview with a letter to the Congressman. For our purposes the incident has a typical value, as showing the President's state of mind, but we are not at all concerned with the individuals. We publish the letter, therefore, with names omitted, and with no thought of using it to reflect in any manner upon the gentleman to whom it was addressed, or upon the man accused of wrongdoing. It is a letter never intended for the public, but rather to make perfectly clear in a private way to certain politicians (themselves free from all thought of complicity in the postal irregularities) that no further attempt must be made to use political arguments for the sake of affecting the President's conduct in his plain duty as the nation's chief executive officer, and therefore as the head of the business services of the Government. The letter, with names omitted, is as follows:

(Personal)

WHITE HOUSE, Washington, October —, 1903.

MY DEAR CONGRESSMAN:

The statement alleged to have been made by the inspector that I "ordered" the indictment of — —, or any one else, is a lie,—just as much a lie as if it had been stated that I ordered that any one should *not* be indicted. My directions have been explicit, and are explicit now. Any one who is guilty is to be prosecuted with the utmost rigor of the law, and no one who is not guilty is to be touched. I care not a rap for the political or social influence of any human being when the

question is one of his guilt or innocence in such a matter as the corruption of the Government service.

I note what you say, that the circulation of this report about me may alienate the support of many of — —'s friends from my administration. Frankly, I feel that any one who would believe such a story must be either lacking in intelligence, or else possessed of malignant credulity. If any one is to be alienated from me by the fact that I direct the prosecution of Republican or Democrat, without regard to his political or social standing, when it appears that he is guilty of gross wrongdoing,—why, all I can say is, let him be alienated.

If District-Attorney — — has anything which should be known to the Attorney-General or to me as regards this suit, I should be delighted to see him. But frankly, I have not the slightest desire to see him if his visit is to be in the interest "of the welfare of the party," or of my "success." In a case like this, where the crime charged is one that strikes at the foundations of the Commonwealth, I should hold myself unfit for this office if I considered for one moment either my own welfare, or the interest of the party, or anything else except the interests of justice. Respectfully,

THEODORE ROOSEVELT.

*Common Hon-
esty Not a
Party Issue.* The Republican party, as a whole, throughout the United States, has no desire to be regarded as in any way connected with an effort to minimize wrongdoing in office, or to shield men who have betrayed their public trust. No party can regard itself as existing chiefly for the protection or benefit of officeholders who abuse their opportunities to cheat the Government and disgrace the country. The hundreds of thousands of greater or lesser "spellbinders" in next summer's campaign who, in every county and township and at every crossroads, will be haranguing for the retention of the Republican party in office will be very glad to be able to declare with perfect sincerity that when it comes to "turning rascals out" of the public service, President Roosevelt has shown himself a masterhand at the business, and has taught everybody that effective zeal for administrative honesty is not one of the questions to be fought out on party lines. The campaign of 1900 was debated on legitimate public questions. The Democrats attacked the McKinley administration chiefly on the issues growing out of the so-called imperialist policy, on the relation of Republican policies to the growth of "trusts," and on the attitude of the Republican administration toward the tariff and other great problems of a business character. The campaign of 1896 was fought chiefly upon the issue between those who believed in the advisability for this country of the single gold money standard and those who believed in American bimetallism. With President Roosevelt's undoubtedly genius for the practical work

of administration, and his well-earned character as the champion of an honest and efficient public service, there need be no serious attempt to bring these postal scandals into the arena of party controversy next year. Mr. Bristow has discovered that the evils he has been ferreting out go back ten years, and are not to be idly laid at the door of Mr. Roosevelt's administration, any more than they are to be mentioned as bringing reproach upon the administrations of Mr. McKinley and Mr. Cleveland. President Roosevelt is using the efficient service of a Democrat, Mr. Holmes Conrad, and of an independent Republican, Mr. Charles Bonaparte, to aid both in the investigation of charges and in the legal work of preparing cases and prosecuting offenders. The rascality to be weeded out is not partisan in its origin or nature. It merely reflects some of the bad tendencies of American public and business life. The cutting out of these canker spots from the public service is not, on the other hand, a partisan process, but it is rather an evidence of the dominating honesty of character and purpose that belongs to good men of all parties. Let neither of our chief national political organizations next year be so hypocritical as to pretend that it is superior to the other in adherence to the common precepts of public and private morality. Let both parties assume that each represents sincere differences about matters of public policy, in a nation made up for the most part of upright and self-respecting citizens.

Honesty as a Municipal Issue. But while it must always be assumed that contests that divide the citizenship of the country into two more or less equal parts that each part is actuated by similar honesty of motive and purpose, and by like standards of morals and patriotism, it is not, on the other hand, necessary to assume that in contests of a more local character both sides may always lay equal claim to purity of purpose and true zeal for the public welfare. Thus, it would be ridiculous, in an endeavor to be impartial and fair, to treat both sides in the pending municipal campaign in New York City as equally entitled to respect on the score of good motives and high purposes. Tammany Hall, except in certain external aspects, bears little resemblance to a legitimate political party. It is an organization dominated by private and selfish ends. Its real leaders are a set of men upon whose character and methods Mr. Ervin Wardman throws light in his article, which we publish elsewhere in this number, on "The Men and the Issues of the New York Campaign." The Fusion side, supporting Mayor Low, is made up of men of all parties and affilia-



THIS DESIGN SHOWS, IN REDUCED FORM, ONE OF THE BEST OF THE SERIES OF ARTISTIC AND EFFECTIVE POSTERS USED EVERYWHERE THROUGHOUT NEW YORK CITY LAST MONTH BY THE CAMPAIGN COMMITTEE OF THE CITIZENS' UNION. IT CLEARLY STATES THE ACTUAL ISSUE INVOLVED IN THE CONTEST.

tions who desire to have the public affairs of the municipal corporation honestly and intelligently carried on for the benefit of the inhabitants of the city.

How the Line is Drawn in New York. As Mr. Wardman clearly shows, the party and another, nor yet between the followers of one powerful and conspicuous set of men as against the followers of another set. On the contrary, it is a deadly struggle between bad government and good government, between a system based upon decency and modern social progress and a system that involves administrative corruption, the promotion of vice, and the protection of crime. The issue is simply and clearly drawn. In spite of a hundred difficulties that stood in the way of a non-partisan people's movement for good local government, the cause of a public-spirited concern for the welfare of the community was again triumphant in getting itself clearly before the voters. This point cannot be too much emphasized. The attempt to argue that the Fusion

movement was cunningly devised for the sake of delivering a naturally Democratic city into the hands of Republican bosses fell flat last month, because there was no substantial basis for such an accusation. In all the history of modern municipal government, no great city had ever seen so widespread and profound a change from inefficient and corrupt government to a *régime* of intelligent and honest administration as the change from the Tammany government during the four years of Van Wyck's mayoralty to the non-partisan administration of Mayor Low, as witnessed in the two years 1902 and 1903.

Mayor Low and His Colleagues. This good government has not been in any sense a one-man affair, excepting as respects the exercise of the appointive power by Mayor Low in selecting his administrative colleagues. It is the uniform testimony of these colleagues, nearly all of whom are men of strong individuality and independence of character, that Mayor Low is a most admirable man to work with, and that he has never tried to dominate their departments in any way to the detriment of their work. The mayor's constant interest in the affairs of the city has been felt at all points; but every departmental head has been free from interference, and the mayor has always shown the most generous disposition to allow his chiefs of bureaus and departments to have the full credit for improved results. No mayor has ever better deserved the honor of a reëlection. No community, on the other hand, has ever had set before it a clearer opportunity to avail itself of the benefits of skill, judgment, experience, and character at the head of its corporate activities than New York City enjoys in Mayor Low's willingness to bear the burdens of the office for another term. Thus, it is not Mayor Low's administration, but the city itself that is on trial.



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HON. SETH LOW.
(Mayor of New York.)

*Lining Up
for the
Campaign.*

A few months ago, there seemed to be a good deal of confusion in the public mind regarding the efficiency of the Low administration, and there was an undue readiness to adopt the opinion that Low could not possibly be reëlected, and that fusion,—that is to say, the coöperation of all elements opposed to Tammany Hall,—would be impossible to secure, and in any event doomed to defeat. Some of the leaders of the good government sentiment, notably the famous district attorney, Mr. Jerome, were much opposed to the selection of

Mayor Low as a candidate, believing that he lacked personal popularity, and, further, that his membership in the national Republican party would be against him. But the logic of the situation required the renomination of Mayor Low; and the progress of the campaign last month fully justified his selection. The mere question of personality, as it soon became evident, was destined to play no part at all in the campaign. It was not to Mr. Low, the man, that good citizenship rallied, but to Mr. Low, the mayor, with the record of the best administration the city ever had. It also became evident that whether or not Mr. Low was destined to be elected on Tuesday, November 3, he was not going to be de-

feated by any great landslide, and that the forces of good government might at least be sure of winning in the next mayoralty campaign. The odds grew steadily in favor of Mr. Low's election as the campaign became active in the last ten days of October; and the analysis of the registration statistics was distinctly unfavorable to Tammany, as it showed that much the largest relative increase of the voting lists was in the districts which two years ago were carried by Low and the Fusion candidates. Meanwhile, the abhorrent character of the Tammany leadership became daily more evident.



T. C. T. Crain.

E. M. Grout.

Geo. B. McClellan

C. V. Fornes.

C. W. Dayton.

H. Bischoff, Jr.

HON. GEORGE B. McCLELLAN AND THE OTHER TAMMANY CANDIDATES BEING "NOTIFIED."

*Incidents
of the
Struggle.*

In the presence of great underlying principles, and of concrete facts having to do with the improvement in all parts of the municipal service, the incidents connected with the selection of the Fusion candidates were almost forgotten. Mr. Jerome plunged so splendidly into the work of the campaign that the fact that he had strenuously opposed Mayor Low's renomination was not only forgiven, but quite forgotten. The two other leading places to be filled on the general vote are that of comptroller, this being the chief financial office, and the presidency of the Board of Aldermen. The present incumbents, Messrs. Grout and Fornes, both of them being Democrats, were, like Mayor Low, renominated by the Fusionists,—that is to say, they were placed in nomination by the Citizens' Union, and accepted by the Republicans and various other organizations. Both had made good records in office, and had opposed Tammany Hall in the most emphatic way. But as a part of an ingenious and careful policy, the Tammany leaders decided to endorse Messrs. Grout and Fornes this year, and place their names on the Tammany ticket. The acceptance by Grout and Fornes of Tammany's endorsement placed them in an ambiguous position. Tammany had meanwhile selected Mr. George B. McClellan as the

candidate for mayor. Since Grout and Fornes, who had been regarded as enthusiasts for Low and the Fusion cause, would not agree to join actively in the fight against Tammany, they were retired from the Citizens' Union and Republican tickets, and the Fusionists agreed upon new candidates. Messrs. Grout and Fornes subsequently went over completely to Tammany, and took an active part in the campaign in behalf of McClellan and against Low. Mr. Hinrichs, afterward selected by the Fusionists for comptroller, is a Democrat of the highest fitness in every respect; and Mr. McGuire, selected for president of the Board of Aldermen, has made a sterling record in the corporation counsel's office.

*The Value
of the
Movement.* The success of the Low ticket will be the best thing that has ever happened for the municipal well-being of a great American city. But in any event, the waging of the fight will in itself have been a very great thing. While a triumph of the Fusion cause at the polls would, indeed, be a matter for congratulation throughout the country, it should be borne in mind that the greatest triumph was gained in the very fact of the persistence of the Fusion movement. New York City, with its nearly four millions of people, its variety of languages, its clashing of interests

and race prejudices, furnishes what, in the language of the day, might be called an exceedingly difficult municipal "proposition." To raise this Fusion standard in such a community as New York, to place the cause upon the basis of commonly recognized principles, and to win for it the support of so large a number of elements and groups, is a marvelous achievement in the sphere of popular self-government. Few events of more hopeful tendency have marked the beginning of this twentieth century than the persistence of the Fusion cause in 1903 after its victory in 1901. Its lessons will have their effect in every city of the United States.

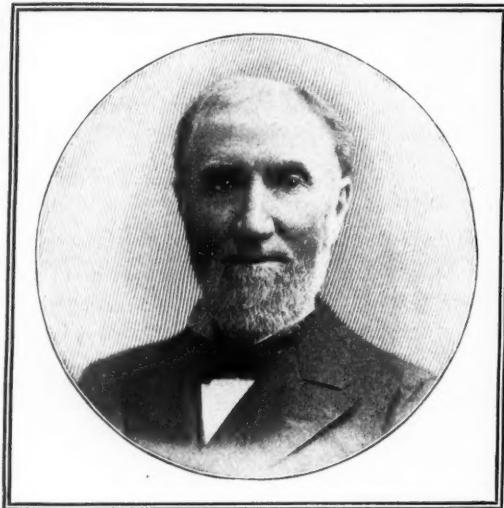
Certain Corporations in City Politics. It became painfully clear in the course of this New York campaign last month that among Tammany's strong allies and supporters were the overgrown local franchise corporations,—the street railway, lighting, and other monopoly concerns,—which hate to pay their taxes, which owe the city large sums of money, and which want all kinds of favors for their own benefit and to the public disadvantage. They have found that such favors cannot be had from an administration so firm and capable as that of Mr. Low; but they know what to hope for from a weak, flabby, and venal administration such as Tammany has always given. In times past, such corporations have victimized the municipality and people of New York City more scandalously than those of almost any other great American town. Under Mayor Low's régime, on the contrary, the public interest has been well guarded; and while no corporation has been prosecuted, none has received any franchise or grant for which it did not have to pay on fair and business-like terms. The offensive activity of these corporations in the municipal and State politics of New York will have received a merited rebuke, if the people, on November 3, again endorse Mayor Low at the polls and uphold the principle of public control.

The Corporations in National Politics. It is a curious fact for the future historian that these same New York franchise corporations, which in the pending municipal campaign have been so bitterly opposed to Mayor Low's reelection, were in their time equally antagonistic to Mr. Roosevelt as governor. They were, indeed, so anxious to prevent his having another term at Albany that they took an active and a highly influential part in creating that combination of circumstances which compelled Mr. Roosevelt against his preference to take the nomination for the Vice-Presidency. Mr. Roosevelt had always been a conservative in the best sense of the word; and he

had done nothing whatever against the street railways and other franchise corporations except to give his adherence to a bill providing that their property should be taxed in accordance with its value, just as any plain man's farm, or shop, or store, is taxed. In the Presidency, where these corporations helped to place him, Mr. Roosevelt has provoked the antagonism of another series of great corporations,—namely, the so-called "trusts." But here again, it is to be observed, the President has always been on the side of the country's legitimate business interests, and has merely undertaken impartially to enforce the laws as he finds them, while recognizing the need of additional legislation which might protect the people against the evils of the methods pursued by certain inflated and overcapitalized industrial and transportation monopolies. The President's attitude on this so-called trust question, while it has won the confidence very largely of the interior and the West, has been particularly reprobated in Wall Street. The tables were sadly turned, however, last month against the trust promoters when the methods employed in the forming and overcapitalizing of some of the trusts, and in the floating of their shares upon the market, were ruthlessly exposed in connection with the collapse of the combination of various shipyards with the Bethlehem steel plant, popularly known as the "Shipbuilding Trust," and officially known as the United States Shipbuilding Company.

"Trust Finance" as a Check to Prosperity. If this company were an exception, the situation would not be so bad. But the legal scrutiny of a number of other combinations has shown a more or less similar recklessness and lack of fine scruples in foisting upon innocent investors great floods of shares of stock. In many instances, these shares have been offered by banking houses and financial establishments whose names ought not to have been lent to any such business methods. A long list of industrial corporations included among the so-called trusts have within the past few weeks suffered an enormous shrinkage of value in the market quotation of their shares, illustrating in a manner prompt and drastic all that had ever been said by the President and the critics of trust methods about the evils of overcapitalization. One thing certainly the recent reverses in Wall Street have shown, and that is the fact that it is the stockholder and the ordinary investor who needs to be protected against the methods of the great industrial corporations, rather than the general public and the consumers of industrial commodities. As for labor, it has shown itself entirely able to protect its own in-

terests as against the trusts. The arrogance, indeed, of the leaders of trade-unionism has of late compelled ordinary employers whose businesses have not been absorbed in the trusts to unite in employers' associations in order to protect themselves against the tyrannical demands of what has now come to be called "the great labor trust." The absorption of too much of the coun-



HON. JOSEPH G. CANNON, OF ILLINOIS.

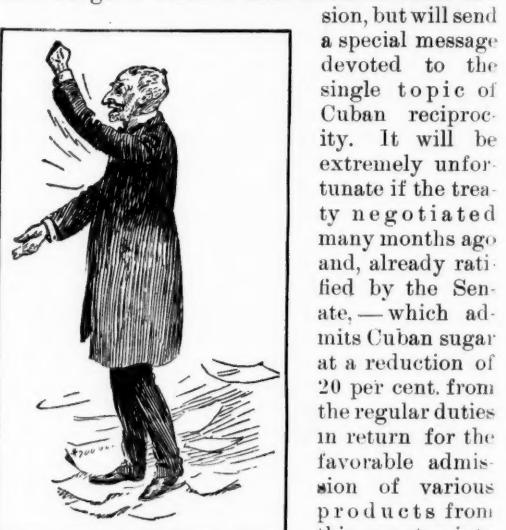
(Who will be chosen Speaker of the Fifty-eighth Congress.)

try's capital in the business of trust-forming and stock speculation on the one hand, and the disturbance caused by the immoderate demands of the labor unions on the other, have united to check somewhat the strong current of the nation's business prosperity. What at first seemed a mere stock liquidation in Wall Street, chiefly involving large operators and promoters, has unquestionably begun to affect to an appreciable extent the credit necessary for the full maintenance of the country's legitimate business. The railroads have begun to retrench somewhat in their expenditure for betterments; the demand for iron and steel has thus fallen off for railroad-building purposes, as it has also declined for other structural and general uses, and in turn the iron and steel industry itself has begun to shut down some of its mills. The great Steel Trust begins to face a reduction of net income, and its directors have cut off one-half the dividends they had been paying on the common stock. The arrogance of unionism in the building trades has scared capitalists out of their plans for new business buildings; and whereas many laborers, skilled and unskilled, would not work when they could,

they are about to find that they cannot work when they would. The reaction does not as yet threaten to be extreme, but it is already in sight. The business of the country does not, in our opinion, bid fair to become stagnant. It will, nevertheless, follow a course during the coming year that will vindicate the remarkable sagacity shown by President Roosevelt in his treatment of the trust question on the one hand, and of the labor question on the other.

The Extra Session and Its Object.

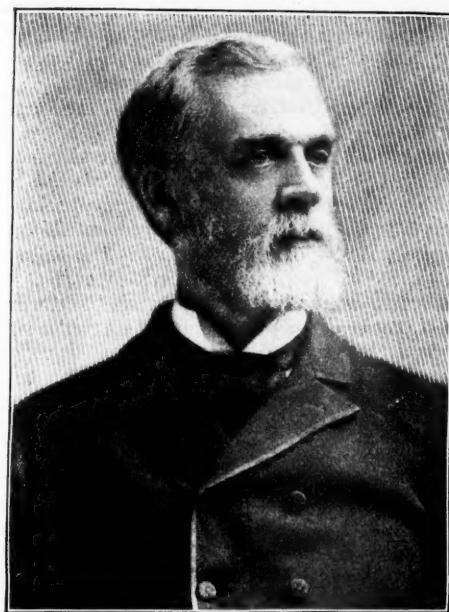
These questions touching the country's general condition are not likely to have much discussion in Congress in the short period of the extra session that begins on November 9, but they must certainly, under one pretext or another, provoke an immense amount of debating before Congress adjourns, early next summer, to allow its members to enter the national political campaign. The immediate purpose of the extra session is to secure final action upon the reciprocity treaty between the United States and Cuba. The President will not send his general message to the new Congress when it thus meets in extra ses-



"UNCLE JOE" CANNON IN ACTION.

From the *Journal* (New York).

by the adverse action of the House of Representatives, which has the right to pass upon the treaty in its character as a revenue measure. The new Congress will be organized with the Hon. Joseph G. Cannon, of Illinois, as Speaker. The Hon. Sereno E. Payne, of New York, will remain chairman of the Ways and Means Committee. It is understood that Mr. Hemenway, of Indiana,



HON. SERENO E. PAYNE, OF NEW YORK

(Chairman of the Ways and Means Committee.)

will succeed Mr. Cannon as chairman of the Committee on Appropriations. It is also understood that whereas Mr. Cannon and these leading chairmen, together with the great majority of the Republican members of the House, will support the President's Cuban reciprocity treaty, there will be a number of Republicans,—including Mr. Tawney, of Minnesota, and other Northwestern men,—who will continue their former opposition to any lessening of duties on Cuban sugar. They are acting in the alleged interest of the production of beet sugar in the United States. It is somewhat remarkable that these gentlemen should continue their opposition in view of the fact that the American Beet Sugar Company, which had originally organized and led this opposition, has withdrawn from the contest. The fact is that the treaty with Cuba will not affect in any way the market price of American beet sugar, nor interfere with the further growth of this new American industry.

The alignment of parties and individuals in the new Congress on this of Congress reciprocity issue will be observed with interest, as having some possible bearing upon the future treatment of tariff and reciprocity questions as bones of party contention. It will not be until the time for the regular session

of Congress, on the first Monday of December, that President Roosevelt will send in his general message containing his recommendations to Congress and his review of the work of the Government during the past year. It is understood that his message this year will be a comparatively brief and succinct document. The party in power has not yet in any manner conveyed to the public the outlines of the legislative programme which it will undertake to carry out during the coming winter. It would be a desirable thing for the leaders of the Senate and the House as early as possible to take a survey of the field, and after consultation with the President, to adopt some short and simple list of measures which might be regarded as the party programme for the session.

The Bogota Clique and the Panama Canal. There is little in the way of news to add to the statements made in these pages last month about the rejection of the Panama Canal treaty by the Colombian Congress at Bogota. In view of the growing interest in the larger bearings of the whole subject, we may venture to call attention again to our somewhat extended discussion in this department of last month's REVIEW. Further information has only strengthened the argument that no further negotiation with the clique now in control of affairs at Bogota would be worth while for a responsible and dignified government like our own. The Bogota gentlemen are merely



HON. JAMES A. HEMENWAY, OF INDIANA.

making what the Tammany politicians would call a "strike" for more money. They have sent a representative to inform Dr. Herran, the Colombian minister at Washington, that they would like to get about \$25,000,000 out of this canal deal, because they have convenient present use for that amount of money. The present Colombian government is the merest travesty, and for practical purposes it has been a futility and a mistake to negotiate with it at all. This, however, is not said by way of reflection on the Department of State at Washington, which has carried courtesy to the utmost limit, and given Colombia the full benefit of every opportunity to avail itself of a most generous proposition. In view of what is not unlikely to happen in the near future, it may be well that our State Department has been so patient and so exceedingly well-mannered in its diplomatic overtures.

The United States and the Isthmus. After all, in every real crisis for half a century the United States has been the guardian of the Isthmus of Panama as a focus of international trade. The Panama Railway has always been an American institution, and it has played a great part as a link of commerce and travel between the Atlantic and the Pacific. Old treaties, rigidly maintained and respected on our part, have made us the guarantors of order at Panama, and have alone prevented chaos. But for the United States, Colombia would have lost the Isthmus of Panama a long time ago. The present behavior of Colombia as respects the canal is in fatal contravention of the rights and interests of the people living in the Panama province, as well as in defiance of the needs and interests of the commercial world, which would like to use a ship canal across the isthmus as one of the great highways of international traffic. Colombia has no rights or concerns on the Isthmus of Panama excepting those expressed in the technical claims of sovereignty; and such claims must be made good by the show of the necessary military and administrative ability to maintain respect for them. As we remarked last month, the best thing that the people of the isthmus could possibly do would be to make a prompt and determined effort to detach themselves from Colombia; and we further remarked that "It would be absurd for the people of the United States to pretend that they did not look with favor upon so righteous and excellent a proposition."

Will Panama Declare Independence? For some time there have been mors of a widespread desire on the part of the Isthmian people to cut loose and form a government of their own,

largely upon the model of the Cuban republic, but having even closer relations than Cuba enjoys with the people and government of the United States. Inasmuch as the permanent control of Panama by the politicians at the remote Colombian capital has now become wholly impracticable, it may be assumed that the movement for Panama independence affords the best solution of the situation. Such a step, promptly entered upon, might bring about the much-to-be-desired stability of equilibrium at the isthmus that would alike benefit North America and South America, Europe and Asia. It would also, of course, greatly benefit Colombia, since the prompt construction of the canal would do more than anything else to develop the trade and resources of the northern part of South America, and to bring about conditions that would make for enlightenment and political progress. It would be quite too much to expect that if the merchants, planters, and business men of the Panama strip should declare their independence, adopt a suitable constitution, and appeal to the United States for friendship and protection, they would be treated with disdain. Our government will no longer follow the plan of sending warships and landing marines on the isthmus with the object, while keeping the Panama Railroad open, of holding the situation for the benefit of the Colombian government.

Attitude of the French Company. It is not to be supposed that the gentlemen who control the new French Panama Company, and who have been thrifty enough to make a conditional sale to the United States for \$40,000,000, have been looking on at the behavior of the Bogota politicians with indifference or with mental sluggishness or indecision. The Bogota politicians have boldly demanded that these French gentlemen and their Wall Street partners should deliver to them a large share of that \$40,000,000 in consideration of their ratifying the Hay-Herran treaty. But the company and its allies have other uses for their money, and they have not believed that there is enough efficiency back of the greed of the men at Bogota either to block the completion of the Panama Canal, or to prevent so powerful and so astute an array of financial, legal, and diplomatic talent as this French corporation employs from carrying out the sale of its assets and obtaining its full \$40,000,000 from an honest and responsible purchaser like Uncle Sam. The original Panama franchise expires within a year. It is notorious that the extended franchise, which runs only six years longer, and which the new French company has undertaken to sell to the United States, was

never legally granted. A high-handed Colombian president, some years ago, dismissed an intractable congress and extended the franchise by his own personal act on payment of \$1,000,000. The Colombian Congress now proposes to declare that such extension was invalid, and to delay proceedings until next year, when the original franchise expires, and when, by the expressed terms of that franchise, the unfinished canal and its appurtenances become forfeited to the Colombian government.

Where Uncle Sam Comes In Again. The Government at Washington has never cared very much about the details of the history of the relations between the Panama Canal Company and the Colombian government. Those relations would not bear close inspection on either side. Our government, on the advice of its own trusted experts, has simply decided that the unfinished canal and the works connected therewith, together with the Panama Railroad, are fairly worth \$40,000,000, and that the present French Panama Company is the legal possessor of those assets, and entitled to sell them and receive the money. This fact of the French company's status, as ascertained after full inquiry by Attorney-General Knox, would not be altered by the creation of a new republic of Panama. If such new republic were to come into existence, it would be capable of signing at once a canal treaty with the United States; and if such treaty were of the kind desired by our government, the new republic would naturally have not only our recognition, but also our protection and our guarantee of a peaceful career. The French company would still be entitled to its \$40,000,000. It is not very likely that Secretary Hay, having in his draft of a treaty with Colombia offered to pay \$10,000,000 for the grant of a canal strip, would reduce the amount in making a treaty with a new Panama republic. Our Secretary would not, however, permit such a new republic to assert over our canal strip any absurd pretensions of sovereignty. On the canal itself, and within the needful limits of a strip of territory on either side, the United States Government would be at liberty in its own way to administer justice, protect the public health, and do whatever it might find necessary in its capacity as a government.

The Interests that Make for Action. The merchants and property owners at Colon, at the town of Panama, and elsewhere in the isthmus, see plainly that their property is dead and their business is ruined if President Roosevelt acts upon the alternative laid down in the Spooner act, drops

the idea of the Panama Canal, and proceeds to develop the Nicaragua route. In like manner, the French Panama Company is perfectly aware that the adoption of the Nicaragua route,—which is made mandatory upon the President in case of failure to secure a governmental concession at Panama,—will render it forever impossible to find a purchaser for its expiring franchises and for the rusting and eroding evidences of its unfinished canal work. Obviously, then, the Panama business men and the agents of the French canal company have every possible motive for acting in harmony, and for acting without a moment's unnecessary delay. How, then, about the attitude of the United States? The answer depends upon one thing,—namely, the extent to which the authorities at Washington really believe in the superiority of the Panama route over the Nicaragua route. If it were merely a difference of a few million dollars one way or the other in the estimated cost of construction, President Roosevelt would probably be very glad—after the fruitless attempts to negotiate with Colombia—to advise the prompt signing of a treaty by our State Department with Nicaragua and Costa Rica, and to go ahead (as he is fully authorized by law to do) without further action by Congress, and begin the construction of the canal along the Nicaragua route as surveyed and originally recommended by the able and expert gentlemen of the Walker commission.



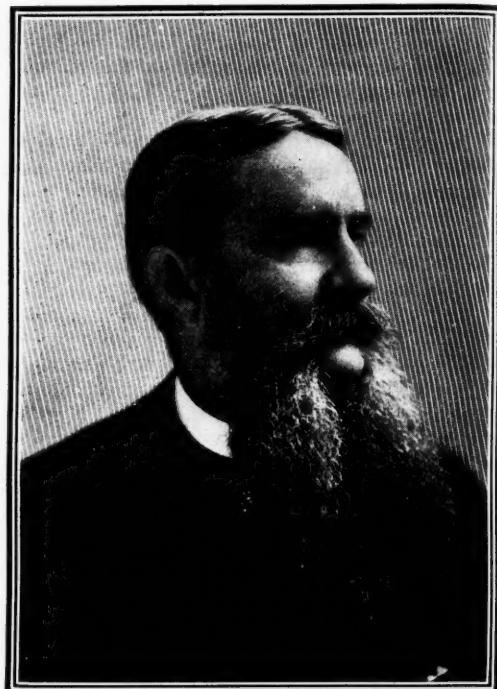
MAKING A REVOLUTION OUT OF IT.

PANAMA: "This treaty the old man threw away may make a cracker that will surprise him."

From the *Journal* (Minneapolis).

The Preference for Panama at Washington. This is precisely what many public men and many important newspapers believe the President ought now to do. Their opinion is based upon the view that the Nicaragua route is entirely feasible from the engineering standpoint, and on some accounts decidedly more desirable than the Panama route. Among a majority of engineering experts, however, the belief prevails that the advantages are greatly in favor of Panama. To put it briefly, they feel more certain that the difficulties of the Panama route may be overcome, and a safe and workable canal provided within a reasonable term of years, than that a canal by the longer Nicaragua route could ever be realized in accordance with financial and engineering estimates. That Admiral Walker, whose views still seem to dominate expert opinion, feels this strong preference for Panama is undeniable. The French company has been ably represented at Washington, and it is accurately informed as to the pro-Panama sentiment that prevails there. The American public may be quite sure, therefore, that the agents of this company will leave nothing undone in order so to clear away existing obstacles at the earliest possible moment, as to make it still feasible for the President to take the Panama route, whereas he must otherwise fall back upon Nicaragua as the law now stands. Such are the factors in an extremely interesting situation. The American public may well await the progress of events with no small degree of curiosity and interest.

How Other Powers Would View It. So far as the great European powers are concerned, the setting up of a Panama republic by processes and agencies in which the United States Government could not be accused of having had any direct part could not well excite criticism. And as for Washington's prompt recognition of such a republic, that would be a matter for our own decision. Obviously, the French Government would concur in a programme designed for the benefit of French citizens. The English Government has wholly acquiesced in the idea that the United States shall build and control an isthmian canal; and it desires to have the waterway open at the earliest possible date, knowing that British ships will be its largest users. South America, furthermore, will derive so much more benefit from the choice of Panama than from the Nicaragua route, that any transient expressions of displeasure, on account of the increased authority of the United States over the isthmus, would promptly disappear in the very genuine interest that would be aroused by the spectacle of Uncle Sam's big dredgers,



ADMIRAL WALKER, THE CANAL AUTHORITY.

steam shovels, and power drills making their way through earth and rock. The German naval jingoes would doubtless express some discontent, and sigh for what might have been; but German commercial interests will be heartily glad to have the assurance of a new route to the Orient.

The End of the Alaska Dispute. If the deadlock at Bogota should indeed, be followed by some such course of action as we have outlined as possible and inherently desirable, the long-vaed isthmian canal question would have been settled to the advantage of everybody concerned, although to the disappointment of a group of Bogota politicians, who would have found that they had overreached themselves. This solution of one very great question of especial interest to the people of our Pacific coast would have come about at almost the same time as the settlement of another vexed question of less importance, but productive nevertheless of considerable anxiety and annoyance. This question is that of the boundary line of the southern strip of Alaska. The facts have often been stated in these pages; but now that an international tribunal has passed upon them in finality, they may be stated again

in brief outline. In 1825, Russia and England made a treaty to establish a boundary line between the coastwise possessions of Russia on the Pacific, and the interior possessions held by the Hudson Bay Company, and regarded as British in character.

The Vancouver Maps and the Treaty of 1825. In those days, although navigators and traders knew the coast line very

well, there had been no careful survey or exploration of the interior. The best-known maps and charts had been those of Vancouver, which had been in common use for a quarter of a century, and which were familiar alike to the Russian and English negotiators of the treaty of 1825. These maps and charts, while fairly accurate as to their tracing of the winding shores and inlets, did not pretend to be exact in locating the mountain chains, or in other details of interior topography. But they all indicated plainly a rather regular chain of coastwise mountains situated some distance inland, leaving a strip of an average width of perhaps twenty or thirty miles along the shore,—this strip, according to all the early maps, fully including the navigable and tidal arms and inlets of the sea. The treaty of 1825 plainly said that the boundary line should follow the peaks of this range of mountains, provided the surveyors should find that it existed. But in the lack at any point of such a range, the line was to be marked at a distance of ten marine leagues (some thirty miles) from the shore.

How Disagreement Began. During the entire period that followed, until Russia sold Alaska to the

United States, there had been no difference of opinion expressed in any quarter as to what the treaty meant, or as to the principles upon which the boundary should be actually fixed on the ground whenever the time came for surveying it and erecting monuments. Under these circumstances, the United States bought Russia's right and title to Alaska in 1867. English maps, official and otherwise, agreed with Russian maps and American maps in their general location of the line between Alaska and the British possessions. It was not until after American miners had discovered gold in the Yukon district, and the rush to the Klondike had set in, that the people of this country discovered an attempt on the part of the Canadians,—who had, within a comparatively recent period, been allowed by England to administer the Hudson Bay country,—to set up an entirely new theory as to the meaning of the treaty of 1825, in order to bring about the result of greatly narrowing the width of the American shore strip, and, above

all, in order to throw the line across inlets and channels in such a way as to give to the Canadians a direct access to several deep-water bays and harbors. When the Joint High Commission assembled, some years ago, to settle the fisheries dispute and some other questions at issue between Canada and the United States, it transpired that the Canadians had made up their minds to adhere to this claim to a large part of our Alaska coast with the utmost tenacity. And it soon became perfectly clear that, quite irrespective of any consistent interpretation of the original treaty, their plan was to secure, in the course of the "give-and-take" of negotiations about various subjects, a good-natured compromise from the United States which would allow them at least one harbor on the Lynn Canal, so that they could proceed directly by water from Victoria and Vancouver to Canadian territory at the point most available of all for short overland access to the Klondike region.

"The Modus Vivendi." It turned out, however, that the American members of the Joint High Commission did not feel themselves at

liberty to trade off American territory, in the process of negotiating about fishing rights, the bonding privilege, and the other matters of commercial adjustment. Meanwhile, the growth of population at Skagway and Dyea, and the immense movement of men and supplies to the Klondike, created a situation rendered acute by the attempt of the Canadian authorities to exercise jurisdiction over soil which England had always previously treated as belonging to the United States. The immediate strain was removed by the signing of a temporary *modus vivendi* between the United States and England, providing for an arbitrary location of custom houses, and leaving the main question for further treatment. It was the general opinion in the United States that this signing of the *modus vivendi* was a great mistake. According to American opinion, the boundary line was too clearly described in the treaty to admit of any of those doubts which the *modus vivendi* seemed to cast upon it. In the Northwest, especially, the opinion prevailed that the *modus vivendi* was needless; and that the United States should, instead, have insisted without a moment's hesitation upon drawing the line in its proper place and keeping it there without any temporizing or discussion. However that may be, it is doubtless true that our willingness to sign such a *modus vivendi*, and to renew it from year to year, encouraged the Canadians to hope for ultimate success in their effort to acquire a deep-sea port on the Lynn Canal, and furthermore led the

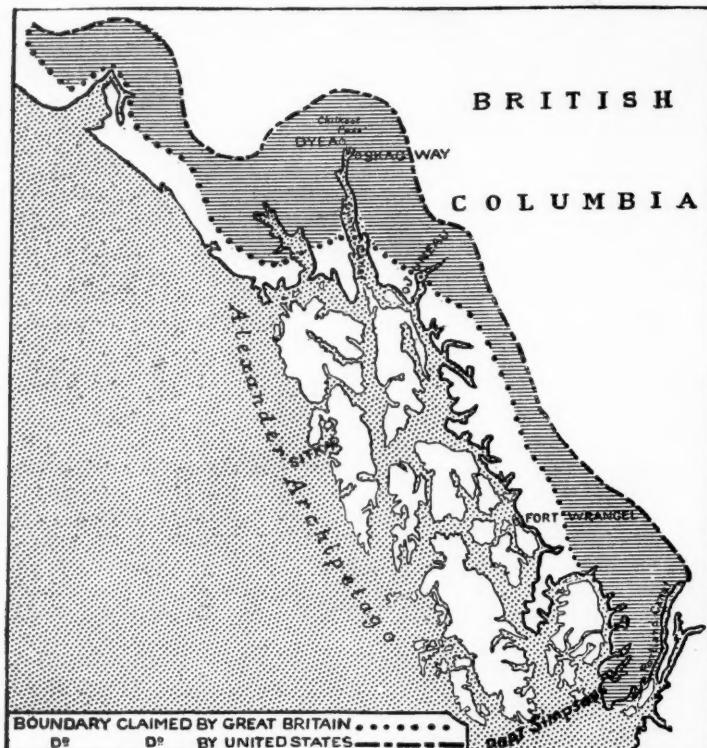
English Government by degrees into the false position of espousing the Canadian view as to the whole contention.

The Recent Tribunal. When the Hay-Pauncefote treaty, abrogating the old Bulwer-Clayton treaty arrangement about isthmian canals, was signed, there was supposed, according to rumor, to be some kind of informal understanding that the United States would in due time join England in referring the Alaska dispute to a tribunal. At the outset, the negotiators provided for a regular arbitration. This would have called in an umpire, presumably from an outside country. President Roosevelt, however, refused to submit territory long held by us in undisputed occupation to the final action of such a tribunal,—especially since no statement or argument had ever been made which cast any real cloud whatever upon our just title to the land in question. President Roosevelt was willing, however, to allow three Americans, all of whom were thoroughly conversant with the whole

matter, and fully aware of the substantial nature of the American case, to meet with three men to be appointed by the government of Great Britain, in order to give opportunity for a full discussion of the whole subject. It was not thought possible that the three Americans could recede from a position held by every intelligent person in the United States, and well known to be held by expert English international lawyers and statesmen,—like Mr. James Bryce, for example,—while also held by all Russians, Frenchmen, and other geographers and international experts who had given the matter any consideration.

The Award Last Month. The meeting of the tribunal in London has already been described in this magazine, and it suffices to say that the award of the Alaska Boundary Tribunal was signed at noon on October 20. There was no reason to suppose that the views of the three American members of the tribunal could have undergone any change, because it was a perfectly clear case from the outset. The presiding

officer on the tribunal was the Lord Chief Justice of England; and the two other members were Canadians, committed to the new Canadian theory. It was well enough known from the start that the worst that could happen was an even division. In that case, the United States would have proceeded to make good its possession. It was also well known that if Lord Alverstone should incline to take the Canadian view, there would certainly come about this even division,—because neither of the two Canadians could have been expected under the circumstances to change his previously held attitude and go over to the American side. Obviously, then, the case was really tried before Lord Chief Justice Alverstone, and before nobody else. The fact that the two Canadians refused to concur in the decision of the tribunal is regrettable, but otherwise of no importance. All the main contentions as presented by the counsel for the United States were sustained with-



THE ALASKA BOUNDARY QUESTION.

(The horizontal shading shows the disputed territory.)



Hon. G. Turner.
Mr. Tower, Sec'y of Commission.
Gen. J. W. Foster.

Sir Louis Jette.
Hon. Elihu Root.

Mr. Watson.

Lord Alverstone.

Hon. H. C. Lodge.
Hon. C. Seton.

Mr. Aylesworth.
Sir R. B. Finlay.

THE ALASKA BOUNDARY COMMISSION IN SESSION AT THE FOREIGN OFFICE, LONDON.

out compromise or diminution by the decision of Lord Alverstone. As respects what was not one of the main American contentions, but a minor point, as to the ownership of an island or two in the Portland Canal, at the southern beginning of the boundary line, there was always some reasonable doubt; and the line as agreed upon will grant to Canada two islands near Port Simpson, which the United States can well spare, and may willingly enough concede.

A reflection or Two. Careful topographical surveys will be requisite to the location and marking of the exact boundary. Curiously enough, the great volume of maps presented to the tribunal as a part of the British case, and containing reproductions of a great number of earlier and later charts, might be regarded as in itself containing all the evidence necessary to the full establishment of the American claim without the necessity of any argument whatever. The Canadians have not done well to accuse Lord Alverstone of having given their case away at the instance of Messrs. Balfour and Chamberlain, in pursuance of the British

policy of friendly relations with the United States. Lord Alverstone is a great lawyer and a great jurist, and his position on this tribunal was such as to permit him to deal with the subject before him absolutely upon its merits. It remains to be said, however, that it would have been much wiser and better for the British Government,—if it were ever in any real doubt as to the justice of the position of the United States,—to have consulted Lord Alverstone and other eminent authorities for its own private guidance. It would thus have learned that the Canadian contention had no substantial grounds to rest upon, and it could have said so frankly. It did not do well to arouse false hopes in the minds of the Canadians, who had nagged it into undertaking this costly method of arriving at a foregone conclusion. The position of the United States in the whole matter forms a new precedent of courtesy beyond any experience in the history of the dealings of nations with one another. For our government has, in a word, allowed the lord chief justice of England to decide that it may and ought to keep what is its own.

*The
Protectionist
Movement
in England.*

The Canadian resentment toward the British Government for its method of dealing with this Alaska dispute is, under all the circumstances, not surprising. It has been part and parcel of that same boasted imperial and colonial statesmanship of the Tory government, under Mr. Chamberlain's supreme direction, which brought on the South African War, and which has now stirred England to a fine ferment by its advocacy of a protective tariff, as an instrument for retaliation against Germany and the United States, and a means for giving preferential favors to Canada, Australia, New Zealand, and South Africa. As recorded in these pages last month, Mr. Joseph Chamberlain had made a sensational withdrawal from the Balfour cabinet, not in order to express any lack of agreement or harmony between himself and the premier, but to have the greater personal freedom to push a protectionist propaganda with which Mr. Balfour was in cordial sympathy. Mr. Balfour, knowing full well that Mr. Chamberlain was going to leave the cabinet, carefully concealed that fact from other leading members of the ministry, who, being free traders, were thoroughly opposed to the new Chamberlain programme. And so it happened that Mr. Ritchie, the chancellor of the exchequer, and several others were allowed by Mr. Balfour to resign for the sole reason that they could not consistently stay in a ministry largely dominated by the colonial secretary,—never dreaming that at the very moment their resignations were accepted Mr. Chamberlain's letter of resignation was also in the prime minister's pocket.

*The
Reorganized
Balfour
Cabinet.*

It was on September 17 that Mr. Chamberlain resigned. Along with Mr. Ritchie, Lord George Hamilton, secretary for India, withdrew; and a few days later, Lord Balfour, of Burleigh, secretary for

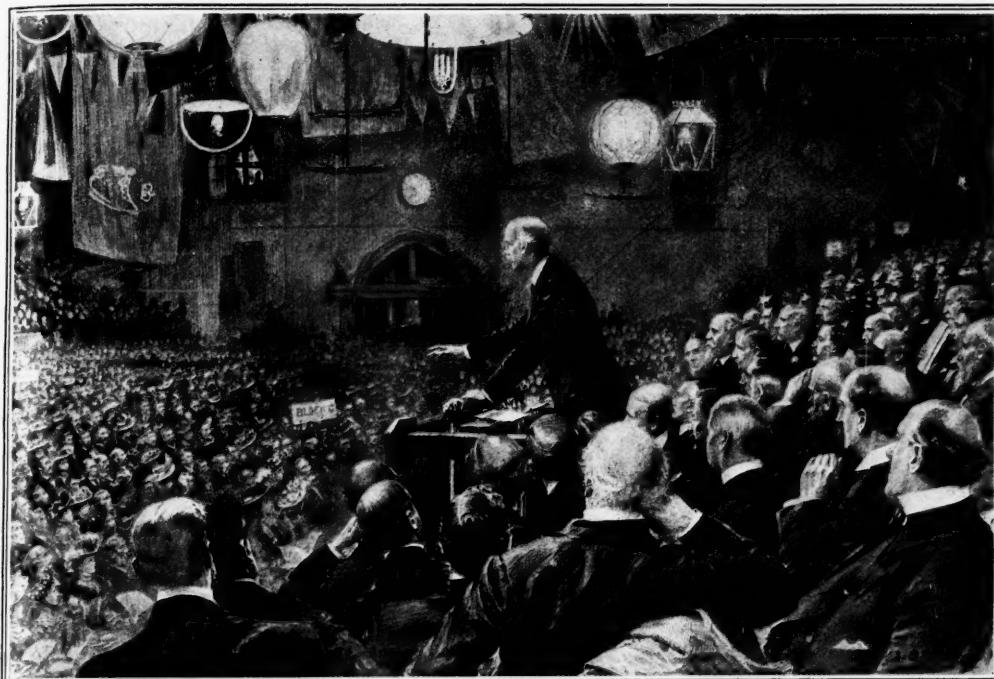
Scotland, and the Hon. Arthur Elliot, financial secretary for the treasury, sent in their resignations, all on the ground of opposition to the new protectionist programme. The vacancies thus created were soon filled. First came the promotion of Mr. Austen Chamberlain from postmaster-general to chancellor of the exchequer. Mr. Austen Chamberlain is now about forty years old, and the eldest son of Mr. Joseph Chamberlain. Although well trained by a decade of experience in Parliament and in ministerial service, the younger Chamberlain has done nothing on his own account which would have seemed to mark him for so high a dignity as chancellor of the exchequer. His appointment, therefore, must be looked upon as intended by Mr. Balfour to be the highest compliment and token of approval he could possibly pay at the moment to the young man's distinguished father. To succeed Mr. Joseph Chamberlain as secretary for the colonies, Mr. Alfred Lyttelton was appointed. Mr. Lyttelton is an eminent lawyer, forty-six years old, the most famous amateur athlete in England, and a member of a very distinguished and numerous family, of highly aristocratic connections. The place vacated by Lord George Hamilton was filled by the transfer of Mr. Brodrick from the War Department. Mr. Brodrick's attempt to reform the British army system had dismally failed, and Mr. Balfour was doubtless glad of an opportunity to try a new hand at that difficult job. The new hand is Mr. Arnold-Forster, who had unquestionably been making a success as head of the Navy Department. Mr. Arnold-Forster is a son of William E. Forster, at one time secretary for Ireland, and a grandson of the famous Doctor Arnold, of Rugby. Mr. Andrew G. Murray, the Scotch lawyer and golfer, succeeds Lord Balfour, of Burleigh, as secretary for Scotland; and young Lord Stanley, famous for his interest in racing and shooting, who had for two or three years been financial secretary to the War Office, succeeds Mr. Austen Chamberlain as postmaster-general. These men are all willing to follow the lead of Mr. Balfour and Mr. Chamberlain in reconstructing the fiscal policy and system of the United Kingdom.



MUM'S THE WORD.

Going to the cabinet council (September 14, 1903). No comment is needed.—From the *Westminster Gazette* (London).

The most eminent member of the Balfour and four cabinet, and its leader in the Devonshire. House of Lords, was the Duke of Devonshire, who held the nominal office of president of the council. Mr. Balfour had fully supposed that the Duke of Devonshire was going to stand by him and remain in the cabinet. Such was the situation when, on the first of October,

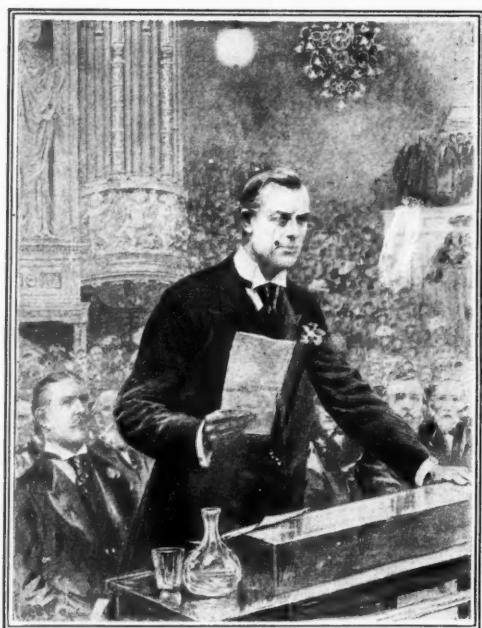
From the *Illustrated London News*.

MR. BALFOUR INAUGURATING HIS POLICY OF RETALIATION AT SHEFFIELD LAST MONTH.

the great annual gathering of the Tory party, known as the Conference of Conservative Unions, assembled at Sheffield. The occasion gave Mr. Balfour opportunity for a noteworthy speech. He skillfully avoided English prejudice against protectionism by advocating the advisability of giving the government "freedom of negotiation." He called attention to the high tariff walls which other countries had steadily been erecting against English trade, and declared that the principles of Cobdenism no longer sufficed for the situation. He did not advocate a similar policy of high protectionism for England, but believed it feasible to adopt a system which would enable Great Britain to discriminate against the products of protectionist countries. To Mr. Balfour's great surprise, this speech was immediately followed by a letter from the Duke of Devonshire repudiating the Balfour ideas and peremptorily withdrawing from the cabinet.

It was evident that the public at large attached no great degree of importance to Mr. Balfour's curiously amateurish disquisitions upon free trade and protection, and his suggestion of a tariff system for the purpose of retaliation. But Mr. Chamberlain's

long-anticipated speech of October 6, at Glasgow, was awaited with the deepest interest, because it had been promised that the real leader of the new movement would on that occasion tell concretely what he meant and wanted. This speech was a very cogent and brilliant exposition of England's commercial position as seen by Mr. Chamberlain through the new spectacles of his conversion to protectionist doctrines. His practical tariff programme was very simple. He would continue to allow wheat and flour to be imported free from the British colonies, but would put a tax of two shillings a quarter (about six cents a bushel) on its importation from the United States and other countries. He would also put a tax of about 5 per cent. on foreign meats (except bacon), leaving Australian and other British meats to be imported free. To meet the cry that he was making food dearer to the workingman, Mr. Chamberlain proposed to reduce very much the present duties on tea, sugar, cocoa, and coffee; and he calculated that as a net result the workingman's total food bill would cost him not more than at present, but less by four or five cents a week. As to manufactured goods, Mr. Chamberlain would put a moderate duty of about 10 per cent. upon the importation of foreign wares.



MR. CHAMBERLAIN INAUGURATING HIS FISCAL CAMPAIGN
AT GLASGOW LAST MONTH.

In return for the preference given to breadstuffs and meats from the colonies, Mr. Chamberlain expects that Canada and Australia will arrange their tariffs in such a way as to give great advantages in their markets to English manufacturers, even to the point of ceasing henceforth to create any new industries of their own.

An Absorbing Controversy. The discussion thus precipitated has aroused Great Britain from political stagnation, and created a live issue which must result in a considerable reshaping of parties. The new questions have rent asunder the Unionist combination so long led by Lord Salisbury, and are uniting the discordant factions of Liberalism. The most notable lack, however, is a Liberal leader able to secure the confidence and allegiance of the elements which could readily unite in framing a party programme. The preference that Mr. Chamberlain's plan proposes to give to colonial products would seem hardly great enough to warrant much enthusiasm for it in Canada or Australia; and the opportunity of retaliation that it would afford is not of a kind that as yet has caused either agricultural or manufacturing industries in the United States any anxiety. In a House of Commons of more than six hundred members vacancies are frequently occurring, through the death or resigna-

tions of members, necessitating special elections, —or, as they are called in England, by-elections, —to fill vacant seats. Such by-elections, within the past few weeks, have on the average shown a strong reaction against the Balfour government and a widespread opposition to the new protectionist views. It seems to be the prevailing opinion that a general Parliamentary election will not be held until next spring.

It is undoubtedly true that the terrible reports from Macedonia have begun to arouse the British conscience in a manner that faintly recalls the excitement over Turkish atrocities in Bulgaria in 1876. But it is the unofficial British conscience that is aroused; and there is no possible chance that the Balfour government will say or do anything toward relieving a hideous situation for which England is even more responsible than Turkey. At a cost of 100,000 lives and hundreds of millions of dollars, Russia had liberated all the western provinces from Turkish rule. Whereupon England demanded and secured a Congress of the Powers, and, assisted by Germany, succeeded in thrusting back under



A MACEDONIAN DEMONSTRATION IN SOFIA.

(A procession of 15,000 Macedonian refugees parading the principal streets of the capital of Bulgaria, bearing an effigy of their dead leaders.)

Turkish rule these very Christian districts in Macedonia where now the Turks are pursuing a career of massacre and devastation far in excess of anything they perpetrated in Bulgaria proper in 1876. England's price for her shameful work was the island of Cyprus, obtained from Turkey by a secret bargain. Mr. Balfour was a very young man at that time, but he was present at the Congress of Berlin with his uncle, Lord Salisbury, who was Disraeli's chief colleague and confederate in the infamous business. The Czar of Russia, with his foreign minister, visited Vienna in September, and there the Austrian and Russian governments reaffirmed the agreement under which they were previously pledged to act in harmony and co-operation in their dealings with the problem of Turkey's position in Europe. They have again sent a joint demand to the Turkish Government that it shall give effect to reforms in Macedonia; and they have warned the government of Bulgaria that it must not interfere. Many thousands of refugees of Bulgarian blood and speech have meanwhile crossed the boundary line from the Turkish provinces into Bulgaria proper; and in the city of Sofia, the capital of Bulgaria, there are now some fifteen or twenty thousand of these unhappy fugitives,—thousands of whose relatives and friends have been massacred by the Turkish soldiers. It is not strange that the people of Bulgaria should have become aroused to an almost uncontrollable pitch of indignation. Prince Ferdinand and the Bulgarian Government, however, are well aware that to enter upon war with Turkey at this time would mean almost certain defeat, with other consequences that might be profoundly disastrous to the principality. If the English Government were in the hands of a Gladstone, it might be possible to call a congress of the powers which should deal effectively with the Macedonian question; but at present there is no prospect of any radical or satisfactory solution.

Russia Stays in Manchuria. Those who are aware of the facts concerning Russia's position in Manchuria were not much surprised by the announcement last month that the beginnings of evacuation, which had been solemnly promised for October 8, had been postponed indefinitely. We have never for a moment believed that the Russians would evacuate Manchuria, any more than that the English would evacuate Egypt. Russia's excuse is that her interests are so large that she could not withdraw her troops and turn over the Manchurian administration to China without having received certain guarantees not yet granted at Peking.

The commercial powers which had most concerned themselves about Manchuria are making no protests, and are contenting themselves with statements to the effect that they will expect Russia to keep open for them the same opportunities of trade that they formerly enjoyed under China's control. On the other side, it is to be said that, from the commercial standpoint, Russia is making a wholly new Manchuria,—with railroads, new cities, and great areas of Russian-tilled wheat-fields. It is quite too much to suppose that all the conditions of trade with this new Russian Manchuria can be subjected indefinitely to the terms of agreements with China relating to a very different sort of Manchuria that is already almost entirely a thing of the past. We must expect to see Manchuria in due time made an integral part of the Russian Empire; and when that takes place, it will very soon come under the same tariff laws as the rest of the Czar's dominions.

Japan and Russia. The declaration that the Russians are going to stay in Manchuria would have attracted greater attention than it did last month but for the fact that the Korean situation was one of still more critical interest. Russian activity in Korea had reached such a pass as to lead the Japanese to the very verge of declaring war. The one supreme object of Japanese policy is to prevent the Russians from getting the upper hand in Korea. It is the opinion of the statesmen and the army and navy leaders of Japan that they are in better position to fight Russia just now than they are likely to be at any time in the future. Russia, however, has no intention whatever of getting into a bloody and expensive war with the Japanese, nor, on the other hand, do Japan's British allies wish to run the risk of being dragged into a general conflict. The best advices, therefore, indicated late last month that the conflict which for a few days seemed inevitable is likely to be deferred for the present. To have accomplished her purposes in Manchuria is quite enough gain for Russia to make this year; and she can well afford to leave Korea to the future. Meanwhile, Russian diplomacy seems to be potent at Peking. The internal troubles of Russia are far more serious than any or all of her external difficulties. There is a new finance minister as successor to M. de Witte, who will find his task a burdensome one. The minister of the interior, M. de Plehve, seems now to have gained the most influential position in the empire. We publish elsewhere in this number a remarkable letter that he sent to Mr. Stead in justification of his policy in Finland.



PROFESSOR AND MADAME PIERRE CURIE, THE DISCOVERERS OF RADIUM, IN THEIR GARDEN AT PARIS.

(See article on "Radium," by Mr. George F. Kunz, on page 585.)

*Notes of
Progress.*

Amidst all the strenuousness of international disputes, war rumors, and political struggles, the nations make steady progress in the pursuits of peace and civilization. England and France have signed a brief treaty looking toward a limited resort to arbitration. A peace conference has been held in Vienna. Many current illustrations might be given of progress in science, in education, and in other beneficent fields of endeavor. A remarkable instance of scientific advance is the discovery of the wonderful new element called "radium,"—an important and learned account of which we publish this month from the pen of a distinguished American scientist, Mr. George

F. Kunz. The English educators under Mr. Moseley's direction are receiving every possible courtesy in their tour of the United States. The French Government is trying hard to find school accommodations for the children displaced by the closing of many of the schools of the religious orders. Sir Norman Lockyer, the astronomer, in a brilliant address as president of the British Association for the Advancement of Science, declared that the British Government ought to invest at once one hundred and twenty million dollars in the business of education, in order to bring English efficiency up to the standards of the United States and Germany.



RECORD OF CURRENT EVENTS.

(From September 21 to October 20, 1903.)

POLITICS AND GOVERNMENT—AMERICAN.

September 21.—Justice Lore, of Delaware, delivers a charge to the grand jury calling for the punishment of the lynchers of the negro, George White.

September 23.—Republican and Citizens' Union conventions in New York City renominate Mayor Low.

September 26.—Iowa Republicans open the campaign in that State; Governor Cummins expresses views on the tariff question in accord with those of President Roosevelt.

September 28.—President Roosevelt returns to Washington.

September 29.—Colorado Republicans endorse the administration of President Roosevelt.

October 1.—Rhode Island Democrats renominate Governor Garvin....Massachusetts Democrats nominate W. A. Gaston for governor....New York City Democrats nominate George B. McClellan for mayor, and renominate Comptroller Grout and President Fornes of the Board of Aldermen (see page 545).

October 2.—Massachusetts Republicans renominate Governor Bates and the other State officers, and pledge support to President Roosevelt for the campaign of 1904.

October 5.—The grand jury at Washington, D. C., returns fifteen indictments in the postal fraud cases....President Roosevelt appoints John P. Nields, an anti-Addicks Republican, district attorney for Delaware.

October 6.—Rhode Island Republicans nominate Col. Samuel P. Colt for governor, and endorse the administration of President Roosevelt.

October 7.—Republican and Citizens' Union conventions in New York City nominate F. W. Hinrichs for comptroller and E. J. McGuire for president of the Board of Aldermen (see page 545).

October 15.—In a test case, the North Carolina Supreme Court decides that a United States district judge must pay the income tax on his salary.

October 20.—Presi-

dent Roosevelt issues a proclamation convening the Fifty-eighth Congress in extra session on November 9, to consider the commercial treaty with Cuba.

POLITICS AND GOVERNMENT—FOREIGN.

September 23.—The Austrian Reichsrath reconvenes.

September 24.—Sir Edmund Barton, having resigned the premiership of the Australian Commonwealth, he is succeeded by Alfred Deakin, who reconstructs the ministry....The Servian cabinet resigns.

September 28.—M. Kossuth, the leader of the Hungarian independence party, issues a manifesto.

September 29.—Alderman Sir T. J. Ritchie is elected lord mayor of London for the ensuing year....As the result of an adverse vote in the Hungarian Diet, Count Hedervary submits his resignation as premier.

September 30.—The Canadian House of Commons passes the transcontinental bill.

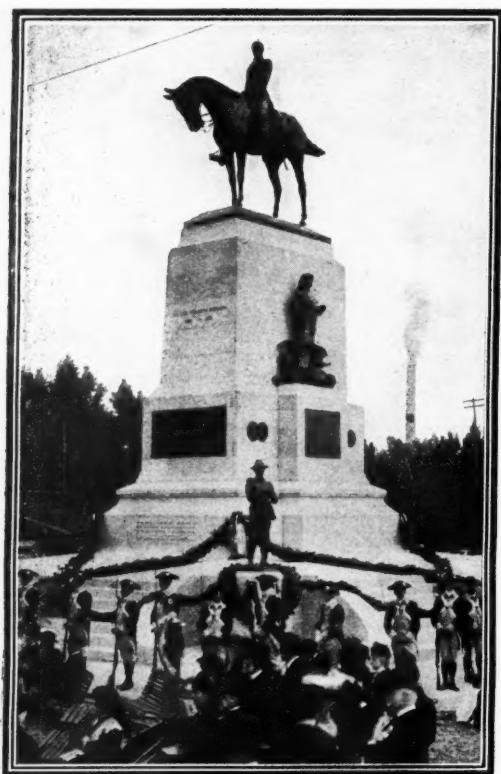
October 2.—Lord Milner declines the British colonial secretaryship.

October 4.—A new Servian cabinet is formed by General Gruitch, with Colonel Andrejevitch as minister of war.

October 5.—The following appointments to fill vacancies in the British cabinet and ministry are announced: The Right Hon. W. St. John Brodrick, secretary of state



THE RECENT MILITARY MANEUVERS IN ENGLAND—SWIMMING HORSES ACROSS A RIVER.



THE STATUE OF GENERAL SHERMAN, UNVEILED AT WASHINGTON ON OCTOBER 15.

for war, succeeds Lord George Hamilton as secretary of state for India; the Right Hon. J. Austen Chamberlain, postmaster-general, succeeds the Right Hon. C. T. Ritchie as chancellor of the exchequer; the Hon. Alfred Lyttelton, recorder of Oxford, succeeds the Right Hon. Joseph Chamberlain as secretary of state for the colonies; H. O. Arnold-Forster, parliamentary secretary to the admiralty, succeeds Mr. Brodrick as secretary for war; the Right Hon. Andrew Graham Murray, lord advocate of Scotland, succeeds Lord Balfour of Burleigh as secretary for Scotland; Lord Stanley, financial secretary to the War Office, succeeds Austen Chamberlain as postmaster-general. The resignation of the Duke of Devonshire from the cabinet is announced.

October 7.—The Servian National Assembly is opened by King Peter.

October 20.—The Italian cabinet resigns.... The French Parliament reassembles.

INTERNATIONAL RELATIONS.

September 21.—The powers formally present their claims against Venezuela.

September 22.—The time limit for the exchange of ratifications of the Panama Canal treaty between the United States and Colombia expires.... It is announced that the Porte has rejected the proposal of an international commission to deal with Macedonian affairs.

September 23.—Mr. D. F. Watson opens the argument for the United States in the Alaskan boundary arbitration.

September 25.—The Sultan names Hilmi Pacha as president of the commission to carry out reforms in Macedonia.

October 2.—The summing up for the United States before the Alaskan Boundary Tribunal is begun by Mr. J. M. Dickinson.

October 3.—It is announced that the Czar of Russia and Emperor Francis Joseph of Austria have agreed on an amplified reform programme to put in operation in Macedonia.

October 4.—Russia and Austria send an identical note to Turkey promising speedy aid to the victims of cruelty in Macedonia.

October 5.—It is announced that President Castro, of Venezuela, has authorized the forcible collection from foreigners of disputed taxes and duties.... The Hon. Wayne MacVeagh concludes his plea for Venezuela before the tribunal at the Hague.

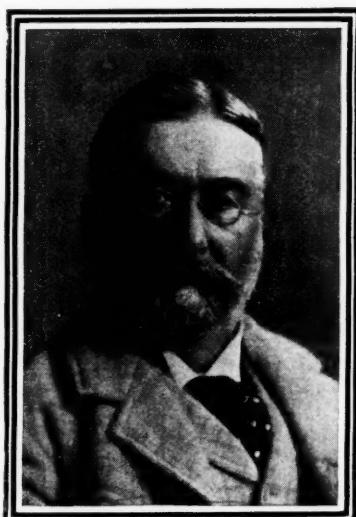
October 6.—Mexican capitalists are awarded claims against Venezuela to the amount of \$510,000.... President Roosevelt appoints three American members of an international commission to consider water routes from the Great Lakes to the Atlantic.

October 7.—Japan's refusal of Russia's proposals for the partition of Korea is announced.

October 8.—The commercial treaty between the United States and China is signed at Shanghai.... Mr. Dickinson, of counsel for the United States, closes his argument before the Alaskan Boundary Tribunal.

October 12.—It is announced at the British foreign office that the powers have decided to uphold treaty rights in Manchuria.

October 14.—The Anglo-French arbitration treaty is



SIR NORMAN LOCKYER.

(Whose address at the recent meeting of the British Association, on the subject of England's need of universities, has aroused great interest. See page 632.)

signed at London....The committee of the Colombian Senate decides that the President has power to negotiate a canal treaty without the Senate's authorization.

October 20.—The award of the Alaskan Boundary Tribunal in London sustains all the main contentions of the United States, and gives to Canada Pearse Island and a few other small islands in the Portland Canal.



THE DUKE OF DEVONSHIRE.

(Whose resignation from the British ministry last month threatened the disruption of the Unionist party.)

OTHER OCCURRENCES OF THE MONTH.

September 28.—Discharged employees of the Consolidated Lake Superior Company attack the officers of the company at the Canadian "Soo;" they are driven off by militia, but the rioting spreads through the town; a receiver is appointed for the company and an injunction issued restraining a forced sale.

September 29.—The University of Porto Rico is opened at San Juan....Nine men are arrested at the Canadian "Soo" charged with inciting the riots of the Consolidated Lake Superior Company's employees.

September 30.—The International Association of Bridge and Structural Iron Workers, in session at Kansas City votes moral and financial support to Sam Parks' Union in New York City, to which it makes a loan of \$1,000....The Rev. Dr. David H. Greer is elected Protestant Episcopal bishop coadjutor of the diocese of New York.

October 6.—A service in memory of Sir Michael Herbert, late British ambassador to the United States, is held in Washington, President Roosevelt being present.

October 7.—A grand jury in Tennessee indicted twenty-

two members of a mob for murder in the second degree for the lynching of a negro.

October 9.—The Honorable Artillery Company of London visits Washington, accompanied by the Ancient and Honorable Artillery Company of Boston.

October 6.—An electric car on the Marienfelder-Zossen experimental line in Germany reaches a speed of 125 4-5 miles per hour.

October 15.—President Roosevelt makes the principal address at the unveiling in Washington of an equestrian statue of General Sherman....Ex-Lieut.-Gov. James H. Tillman, of South Carolina, is acquitted of the charge of the murder of N. G. Gonzales on January 15, 1903....Regular troops and militia go into camp on the Fort Riley Reservation for a series of maneuvers (see page 564).

October 16.—John Alexander Dowie, "Elijah the Restorer," arrives in New York City, with nearly four thousand followers, and begins an evangelistic campaign.

October 18.—Monsignor Merry del Val is appointed Papal secretary of state....Statues of the Emperor and Empress Frederick are unveiled at Berlin.

October 19.—M. Santos Dumont's new dirigible balloon is satisfactorily tested near Paris....The Maryland Trust Company and the Union Trust Company, both of Baltimore, go into the hands of receivers...."Cresceus"



THE LATE SIR MICHAEL HERBERT.

(British ambassador to the United States.)

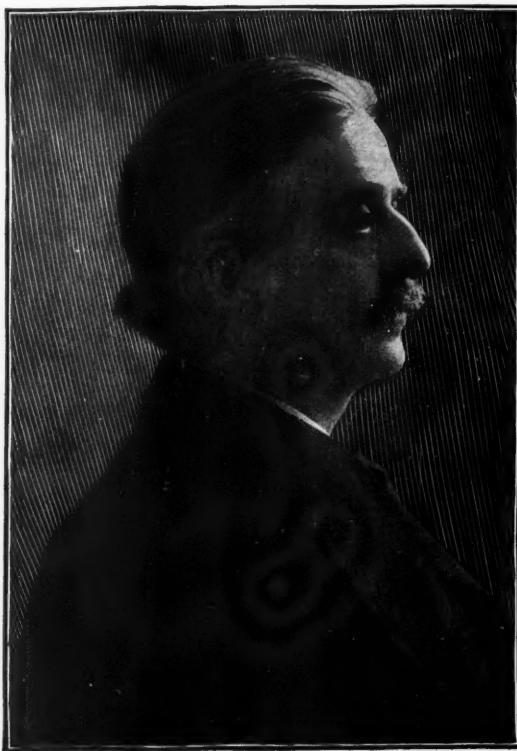
trots a mile in 1:59 $\frac{1}{4}$ at Wichita, Kan., thus lowering the world's record.

OBITUARY.

September 21.—Frederick S. Gibbs, a well-known Republican politician of New York City, 58....Col. Charles Victor Deland, a veteran newspaper man of Michigan, 75.

September 22.—Louis Arsène Delaunay, the French actor, 77....Col. J. M. Underwood, one of the builders of the Northern Pacific Railroad, 61....Alson Smith Sherman, one of the early settlers of Chicago, 92.

September 23.—Ex-United States Senator Charles B. Farwell, of Illinois, 80.



THE LATE HENRY D. LLOYD, OF CHICAGO.

September 25.—Justice William Gillespie Wyley, of the Louisiana Supreme Court, 72.

September 26.—William L. Jenkins, formerly president of the Bank of America, New York City, 97.

September 28.—John H. Dolph, the American painter, 69....Ex-Judge Herbert J. Davis, of Chicago, 45....Henry Demarest Lloyd, the well-known writer on sociological subjects, 56....Henry J. Willing, a pioneer business man of Chicago, 67.

September 29.—Marie Geistinger, the German actress and singer, 67....Prof. Benjamin G. Brown, of Tufts College, Mass., 66....John Baynes, inventor of photographic appliances, 61.

September 30.—Sir Michael Henry Herbert, British ambassador to the United States, 46.

October 1.—Henry S. Washburn, the Massachusetts iron manufacturer, author of "The Vacant Chair," 90.

October 3.—Chief Justice J. Brewster McCollum, of the Pennsylvania Supreme Court, 71....Gen. Orland Smith, ex-vice-president of the Baltimore & Ohio Railroad, 78.

October 4.—Gen. William P. Carlin, U.S.A., retired, 75....Col. Leonidas William S. Pratt, one of the surviving members of the South Carolina Secession Convention, 84.

October 5.—Gen. Bradley T. Johnson, a Confederate veteran, 74....Rev. Edward A. Rand, the story writer, 66....Simon Yandes, the Indiana philanthropist, 86.

October 6.—Wilson S. Bissell, Postmaster-General under President Cleveland, 56.

October 7.—Dr. John B. Johnson, for over sixty years a leading physician of St. Louis, 86.

October 8.—Gen. John A. Leggett, territorial governor of Montana under President Grant, 71.

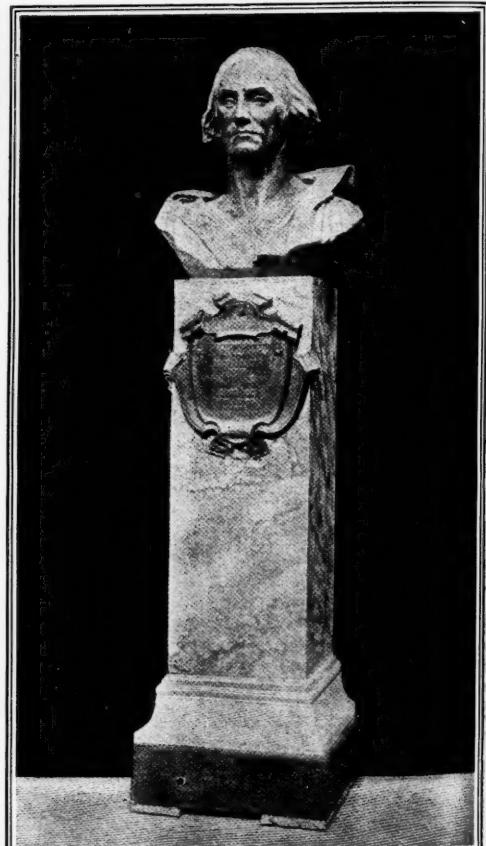
October 11.—Col. Richard Henry Savage, soldier, author, traveler, and scientist, 57.

October 12.—Justice William H. Adams, of the New York Supreme Court, appellate division, 62.

October 13.—Archbishop John Joseph Kain, of St. Louis, 62....Dr. Marcus M. Jastrow, a prominent Hebrew scholar of Philadelphia, 74.

October 14.—Henry C. Jarrett, the well-known theatrical manager, 75....Ex-Gov. Henry T. Mitchell, of Florida, 69...."Mother" Eliza D. Stewart, the famous temperance crusader.

October 16.—Col. Sir William Colville, King Edward's master of ceremonies, 76....Prof. Charles E. Greene, dean of the engineering department of the University of Michigan, 60....A. C. Fulton, an Iowa pioneer, 92.



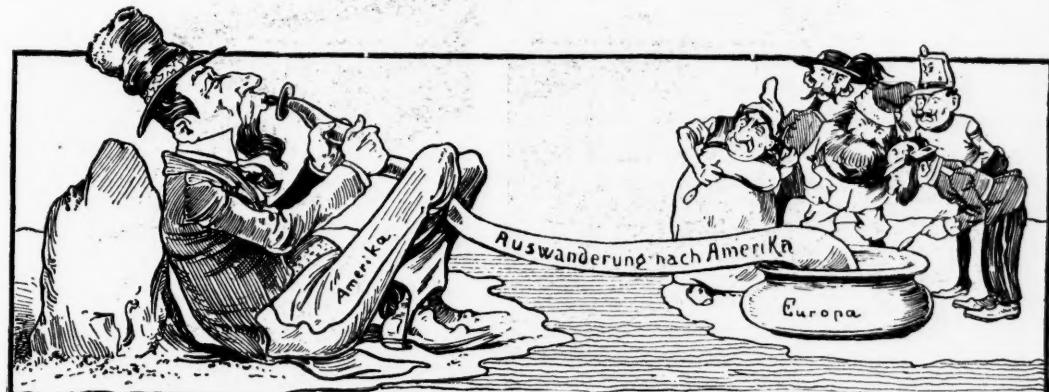
BUST OF WASHINGTON, BY D'ANGERS.

This bust has been presented to the United States Government by certain French families, whose ancestors fought under Washington in the American Revolution.

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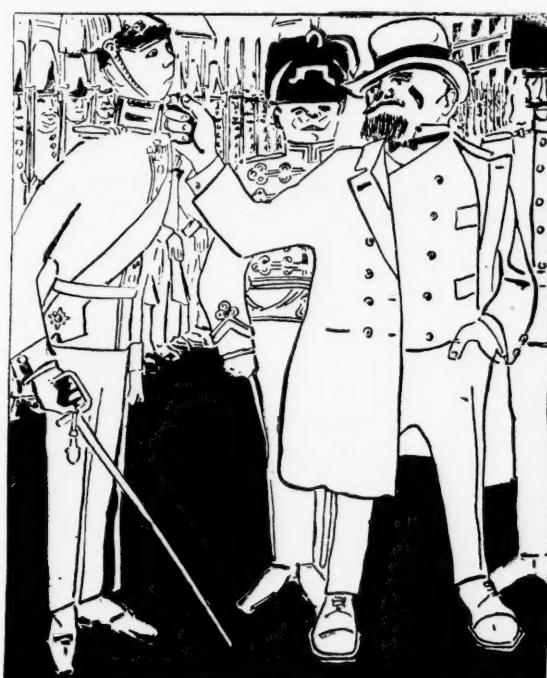
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CARTOONS, CHIEFLY EUROPEAN, ON CURRENT TOPICS.



AMERICA DRAINING THE STRENGTH OF EUROPE.

CHORUS OF POWERS: "The rascal is drinking up all our soup."—From *Wahre Jacob* (Berlin).



THE AMERICAN MILLIONAIRE IN BERLIN.

AMERICAN (to the Emperor's son): "Well, well, so you are the young gentleman who will be king one day."

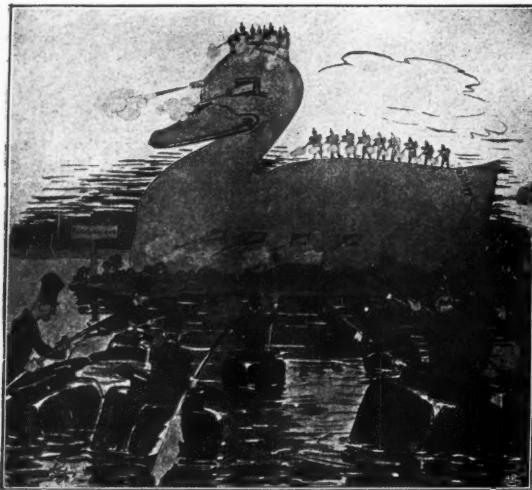
From *Simplicissimus* (Berlin).



A GERMAN VIEW OF THE WORLD'S FAIR OF 1904.

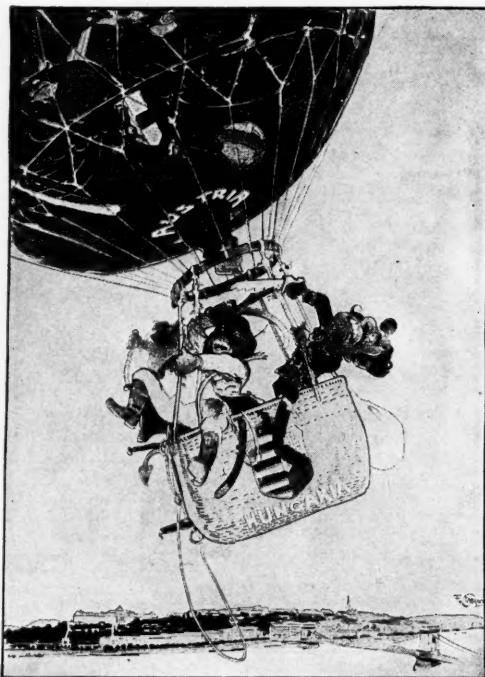
The worship of the Golden Dollar in St. Louis.

From *Lustige Blätter* (Berlin).



THE EMPEROR'S ISLAND—A CASTLE IN THE AIR OF THE
"VORWÄRTS."—From *Ulk* (Berlin).

(It was absurdly rumored that the German Kaiser was fortifying an island as a personal refuge from the Socialists.)



THE SOLUTION OF THE HUNGARIAN QUESTION,—"FREE
FROM AUSTRIA."—From *Lustige Blätter* (Berlin).

(The Hungarians are represented as so eager to be free as to be committing an act of virtual suicide.)



IN THE SERVIAN ZOOLOGICAL GARDENS: KING PETER AND
HIS MILITARY ADVISERS.

From *Kladderadatsch* (Berlin).



IN DARKEST GERMANY.
Double-faced Justice—or one law for the rich and another
for the poor.—From *Simplicissimus* (Berlin).



THE ALLEGED SUPPLYING OF ENGLISH MUNITIONS OF WAR
TO THE MULLAH,—AN ITALIAN VIEW.

From *Fischietto* (Turin).



KING LEOPOLD GOES TO FRANCE TO DEFEND HIMSELF.

LEOPOLD (to Loubet): "What do you think? John Bull swears that I have killed and destroyed much more than he . . ."

LOUBET: "No, your Majesty; that is impossible."

From *Amsterdamer* (Amsterdam).



MACEDONIA COMES BRUSQUELY AND DISTURBS THE PEACE
CONFERENCE AT VIENNA.—From *Pasquino* (Turin).



THE MACEDONIAN TROUBLE.

FRANZ JOSEPH (to the Czar): "What a good thing it is, O head of the Greek Church, that our Christianity does not demand of us the ending of that bloodshed . . ."

CZAR (to Franz Joseph): "Indeed it is, your most Christ-like Majesty!"—From *Amsterdamer* (Amsterdam).



A DUTCH VIEW OF MR. CHAMBERLAIN'S RESIGNATION.

From *Amsterdamer* (Amsterdam).

THE PREDOMINANT PARTNER.

Lady Macbeth—Mr. Chamberlain. *Macbeth*—Mr. Balfour.

LADY MACBETH (about to retire): "Give me the dagger lying disengaged. I'll do it on my own."

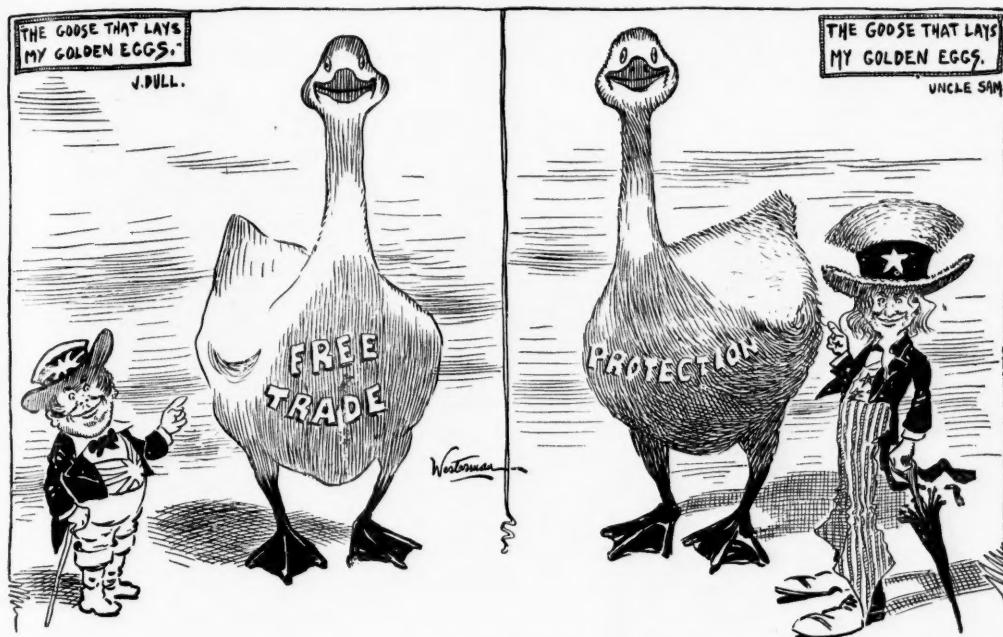
Shakespeare (Birmingham edition), *Macbeth*, Act II., Scene 2.From *Punch* (London).

BALFY: "I say, Joe! it's getting a fearful bore, knocking these kind of things on the head, dontcherknow?"

From *Judy* (London).

ENGLAND'S "SPLENDID ISOLATION," UNDER CHAMBERLAIN'S PROTECTIONIST SCHEME.

From *Le Grelot* (Paris).

TWO GEESE.—From the *Ohio State Journal* (Columbus).

THE NEW TUG OF WAR.

JOHN BULL: "Yes; this is better than a boat race, Brother Jonathan."

UNCLE SAM: "It would be mighty unneighborly if we two had no point of difference, wouldn't it, John?"

From the *Journal* (Minneapolis).

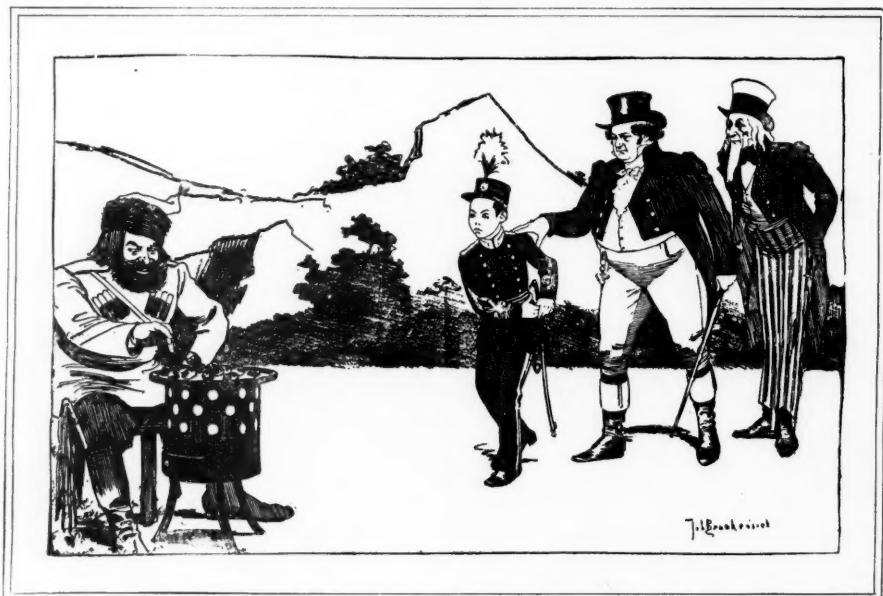


QUESTIONS REGARDING ALASKA.

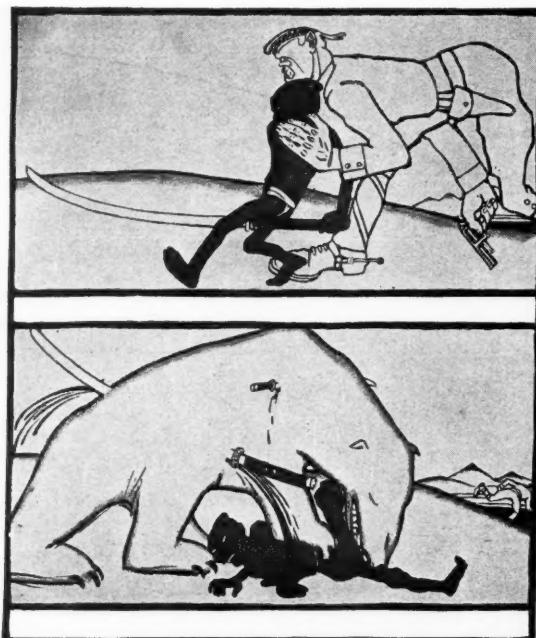
CANADIAN (reads): "If our commissioners come back without the full extent of our claims, they need not show their faces in our country again."

JONATHAN (sharply): "Which of your rags prints that, Davie Macdonald?" (Sees title and whistles.) "Darned if it ain't one of our New Yorkers."

From *Britannia* (London).



JOHN BULL (to Japan) : "You just pull the chestnuts out of the fire for us, else the Cossack will eat them all up."
From *Amsterdamer* (Amsterdam).



FAITHFUL ALLIES.
The English-Japanese Alliance put to the test for the first time in Manchuria.
From *Simplicissimus* (Berlin).



BRAIN POWER.
JOHN BULL: "No wonder the bloomin' Americans get ahead; look at the power plant."
From the *Journal* (Minneapolis).

MEN AND ISSUES OF THE NEW YORK CITY CAMPAIGN.

BY ERVIN WARDMAN.

(Editor of the *New York Press*.)

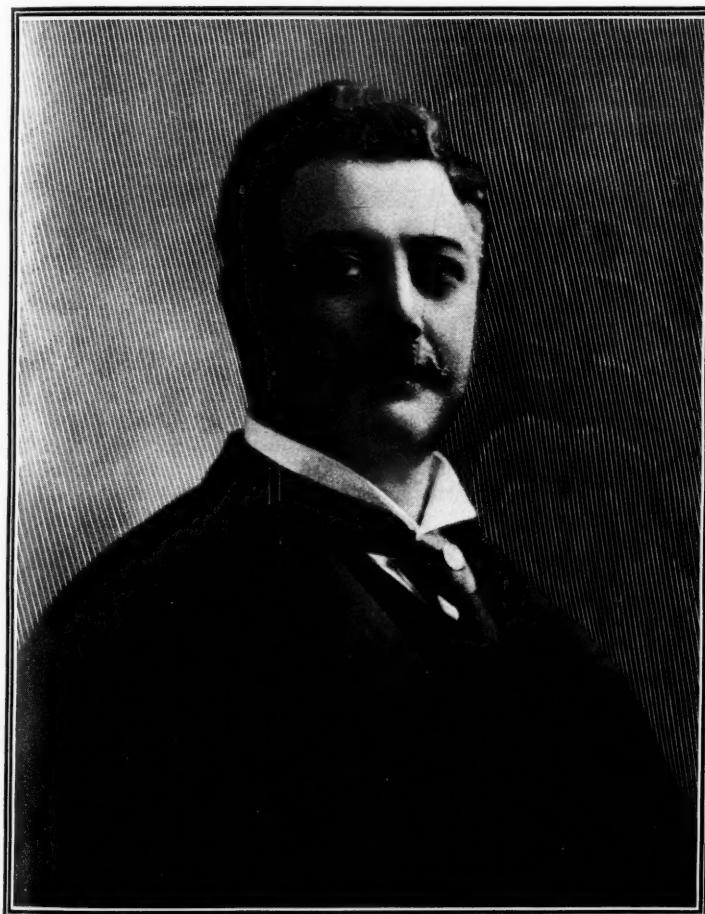
SIX months after Mayor Low began his non-partisan administration of New York City, in January, 1902, its political foes, with jubilant jeers, were proclaiming it a Fusion become Confusion; and tens of thousands of voters who had helped to put Mr. Low at the head of their

municipal affairs were confessing, sorrowfully or irritably, the aptness of the vulgar pun. Six weeks before this election of 1903, that recently derided Fusion was showing a firm front and a power of cohesion not more the admiration of its friends than the astonishment of its enemies.

If Mayor Low had not aroused enthusiasm for his personality and his peculiar ego, he had, by the time this campaign opened, so ordered his official household and so performed the works of Fusion that there was established a compelling cause, failing a great leader, for all men of civic ideals to follow.

FUSION'S MOTLEY HOST.

Perhaps no greater tribute could be paid to Mr. Low's singleness of purpose as mayor, despite what large numbers of those who will vote again for him are convinced was a defect of manner and method, than the remarkable fact that so many different Fusion elements, so irreconcilable on nearly all other questions, are rendering to the mayor's administration—his handi-work—the honor which they decline to render to him the man. For Jerome, Round-head intolerant, with the ardor and gallantry of the Cavalier, has denounced with bitter scorn the Republican party, the Citizens' Union, and every other Fusion factor for permitting the renomination of Mr. Low, has heaped even violent abuse upon him, has scoffed at the very idea



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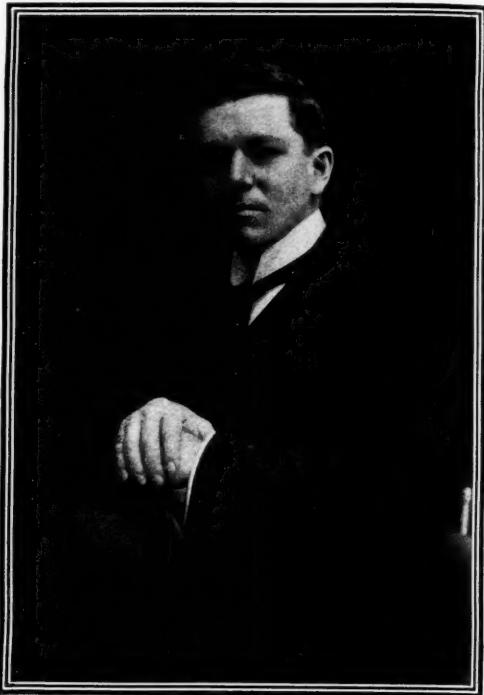
HON. SETH LOW.

(The present "reform" mayor of Greater New York, and "Fusion" candidate for reelection.)

that men could be asked to vote for him. Yet this Prince Rupert of 1901, the leader of those New York Democrats who are self-styled decent, has taken the field for him, and no man's voice is clearer in the fight, and no sword swings more valorously. Herman Ridder, who from the day that Mr. Low began to enforce the excise law fought him with German truculence to the very hour of his renomination, leads out his famous "Ridderbund," the German-American Reform Association, which its allies call 40,000 strong and its opponents 40, but which, when all is said and done, has always been a power in local elections, and nearly, if not quite, always on the "Winning Side." Mr. Thomas C. Platt, always till now a champion of reform when out, its scoffer when in, a proverbial despiser of Mr. Low in all political weather, marches at the front of the regular Republican organization, of which he is the titular head, with banners flying for Low; and cheek by jowl with his ranks are the anti-Platt Republicans, even more numerous probably in voting strength, though not in office-holding, than the regulars. From Brooklyn come partisans and non-partisans representing similar groups of citizenship. Tim Woodruff,—an enormous success in commercial life, an administrative genius in practical affairs, shrewd to apply business methods to politics,—heading the Republicans, though no lover of Low. Kings County Democrats are running "wild-cat." In the same ranks are the Cleveland Democrats of Manhattan to a man. Even portions of the Greater New York Democracy, dubbed mercenaries by both great political parties, send battalions to the host, though its leaders themselves—chiefly John C. Sheehan, a professional public contractor, and "Jake" Cantor, adroit in turning politics to personal advantage—have once more crossed over, this time to Tammany.

Lastly, there is the force which, confessedly, in municipal affairs, knows no party nor faction, the Citizens' Union, which, if it is not the creation, is at least the charge, of Mr. R. Fulton Cutting, and to which—every man, partisan or non-partisan, must confess—is due the credit for the fact not only that this Fusion movement came into existence and won its first success, but remains in existence, and is not to-day,—as nine men out of ten, perhaps, expected,—an unlamented corpse.

Here is a host so motley that were it ranked in any other cause than that of municipal decency must seem a collection grotesquely absurd,—the careful and (so far as lies in his power to remain so) inconspicuous Cutting, of unselfish purpose and stainless ambition, a man of good life,



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HON. GEORGE B. McCLELLAN.
(Democratic nominee for mayor.)

seeking to have good work the public hallmark of the city in which he lives, and in which he has become so influential a part. He has reproached Jerome, the fiery and dauntless, and Jerome has taunted him with a scorching tongue. Each has mistrusted the professional wiles of Platt, the politician, and he in turn has assailed them with a venom singularly his in political attack. The German type, represented by Ridder with his *Staats Zeitung* newspaper, is irreconcilably hostile to Platt, sympathetic with Jerome because of his excise views, unappreciative of Cutting, particularly suspicious of the anti-Platt Republicans (the Roosevelt and Odell members), and filled with wrath toward Mayor Low himself. Yet are they altogether in support, and beyond doubt, for the most part, earnestly in support of that man for mayor.—the man for whom no one of them has a trace of friendly feeling, with the single exception of Mr. Cutting, and with whom no one of them, save again Mr. Cutting, is more than on bare speaking terms.

A CAUSE THAT LEADS ITSELF.

Now, it is the extraordinary anomaly of this situation, as it is its extraordinary strength, that

there is not a foremost leader of the Fusion forces. With such normally opposed influences, opposed diametrically, and with such naturally bitter enmities aiming for the same purpose, there could be no possibility of a leader. There is no William of Orange holding by sheer will-

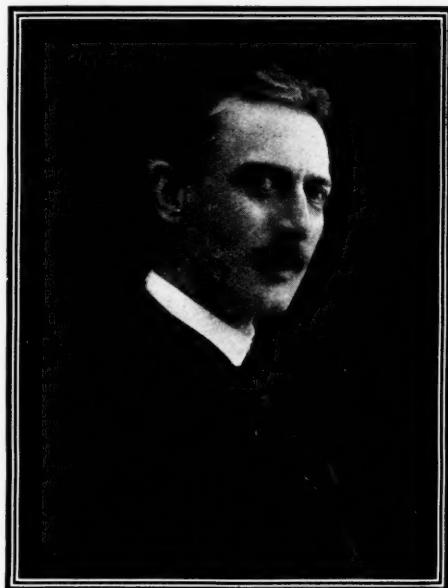


Photo by Dana, Brooklyn, N. Y.

MR. FREDERICK W. HINRICHs, OF BROOKLYN.

(Fusion nominee for comptroller.)

power a wavering Protestant federation to half-hearted zeal in a cause made strong by him. There is, on the contrary, a cause holding to itself by its own great strength a variety of elements having naturally no cohesive qualities, having every possible tendency, otherwise exerted, to fly in all directions.

And this is the work of Mayor Low in having builded an administration which from promise came to fulfillment in the founding of a cause, proved now to be a theoretic ideal and a practical possibility both,—simply the work of an honest and an earnest man, whatever his failings, tilling fields before given over to corruption. Mr. Low is not the leader. The majority of the captains who are fighting with him for the Fusion ticket declare—perhaps they are right—that he possesses none of the qualities of leadership. But if he does not, he has set up in New York, by enforcing President Roosevelt's vernacular axiom of "making good," something which gives promise of being more formidable, as certainly it is more permanent, than personal leadership—the leadership of a cause.

THE TAMMANY LINE.

And that is the one and all of the temper and the inspiration, the blood and sinew of the campaign transformed back again from Confusion to Fusion, and from wavering doubt to a growing power, which has compelled the one-man absolutism of Tammany Hall to go to Fusion's ranks and steal away some of its ammunition in the persons of Messrs. Grout, comptroller, and Fornes, president of the Board of Aldermen! One-man absolutism, because admittedly in Tammany Hall there is one Boss, to whom all others must bow down.

Here, also, is the vast difference between the opposing forces lined up in New York on the eve of election. In the Fusion mass there are elements almost innumerable, knowing no common leader, but following the cause represented in a word significantly dropped from men's lips in these recent months more often than any other—decency. The Tammany thousands follow one leader, Murphy, the putative Boss, and, —you shall hear it everywhere from all the Fusion voters,—with a single burning ambition —Graft! Graft to be parceled out in generous share among the mighty warriors, flung in contemptible fragments for the lesser, in the municipal trough.

THE M'LAUGHLIN DEMOCRATS OF BROOKLYN.

Because of this supreme leadership of one Boss were omitted purposely from the Fusion cata-



MR. EDWARD J. M'GUIRE.

(Fusion nominee for president of Board of Aldermen.)

logue the McLaughlin Democrats of Brooklyn, who are counted on to aid, secretly at least, the Fusion ticket at the polls. They were passed over in that enumeration as being not an element of, but an influence for, Fusion. They do not follow the cause of Fusion; they are lustng after vengeance. To defeat Tammany they offer no championship of Mr. Low or of his administration; they prate to their followers of an unfair share of future spoils to inflame the passions. They are not up in front abreast of the Fusion ranks; they are hanging at the Tammany rear, to stab it in the back.



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DISTRICT-ATTORNEY JEROME.

(The sturdy champion of the Fusion cause.)

The McLaughlin Democrats have been fighting Tammany Hall because of what they call the greed of the Boss—the greed of a system which in its relation to the general Democratic party is not so much a political organization as a shrewdly planned and unscrupulously conducted business for personal gain. The McLaughlin rising is an act of self-defense, for the supreme Boss-ship of Tammany Hall threatens to swallow the hitherto supreme rival Boss-ship of "Willoughby Street," Brooklyn's regular organization of Democrats. Aaron Burr never went so far as that, nor Fernando Wood, nor William M. Tweed, nor John Kelly, nor Richard Croker, unless Richard Croker is still the supreme Boss,

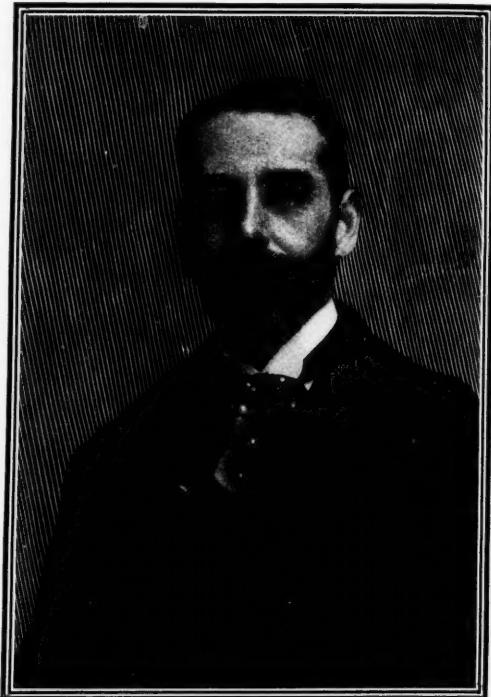


Photo by Hollinger.

MR. R. FULTON CUTTING.
(President of the Citizens' Union.)

and Charles Murphy, as the Democrats who still repudiate Tammany Hall declare, only his proxy. Already the Brooklyn organization is in the jaws of the tiger. It will go all the way down the yawning throat unless it cuts its way out with a knife at the polls!



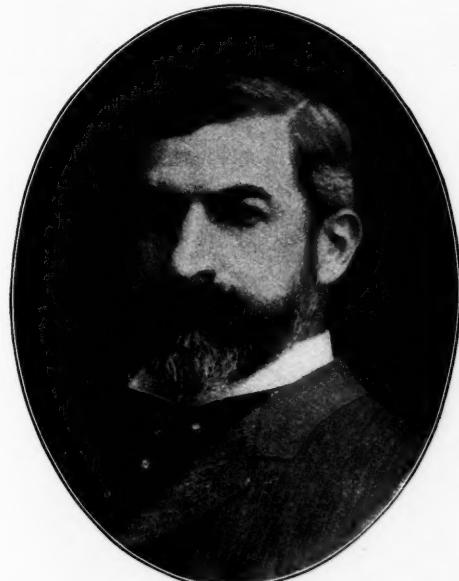
MR. LINN BRUCE.
(Chairman of the New York Republican County Committee.)

THE MINOR CANDIDATES.

Never before was there a situation in New York like this, where factors in the Fusion councils assume more importance than the Fusion candidates themselves; where the Fusion supporters are more prominent and count for more than their chosen representatives on

the ticket; where probably not one man in ten who is going to vote the Fusion ticket knows what candidates are on it—Hinrichs for comptroller in place of Grout, apostatized to Tammany Hall; McGuire instead of Fornes, likewise translated to a new allegiance—where the voter neither knows nor cares, because the personalities of candidates, even of Mr. Low himself, are swallowed up and absorbed in the cause that is served. No more do they know or care, either, against what candidates they are voting, —a McClellan for mayor, Grout for comptroller, or Fornes for president of the Board of Aldermen,—because, again, they vote against the Tammany system.

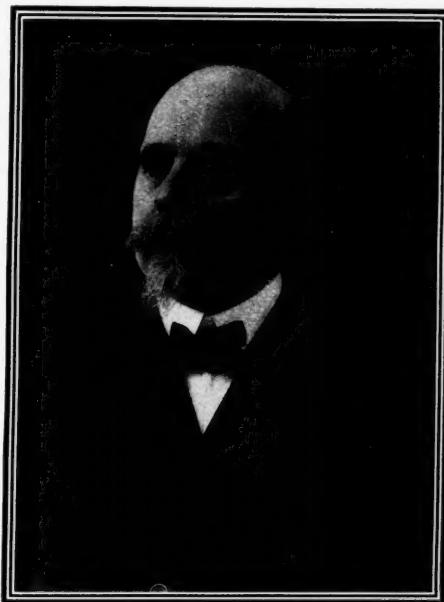
Never before was there a situation like this in New York, where in the midst of the campaign Tammany drafted from Fusion for its ticket Comptroller Grout, long a non-partisan reformer and anti-Tammany worker, and Mr. Fornes, president of the Board of Aldermen, they in turn then being put off the Fusion ticket. Mr. Grout was replaced by Frederick W. Hinrichs, a man of broad education, an expert in railroad law, a lover of art and music, ranking high among literary men, a graceful speaker, a student who won honors in the University of Göttingen, Germany, and honor man in Columbia College Law School; prominent twenty years ago



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HON. EDWARD M. GROUT.

(The present comptroller of New York in the Low administration, and the Tammany candidate for reelection.)



HON. CHARLES V. FORNES.

(President of Board of Aldermen, and Tammany candidate for reelection.)

in Brooklyn as an advocate of clean politics; one of the organizers of the movement to prevent David B. Hill's snap convention of 1892 from having effect on the political fortunes of Grover Cleveland; stumping Brooklyn against the Willoughby Street machine in 1893, 1894, and 1895, and supporting Seth Low in 1897, and again in 1901, although Edward M. Shepard was and is his close friend. Mr. Fornes gave way to Edward J. McGuire,—a civil lawyer of wide experience, one of the organizers of the Catholic Club, graduated with high honors from college, consistently anti-Tammany from his first vote, a hard worker in every movement to elevate the standard of Democratic politics in the city and State; against Bryan in 1896 and in 1900, and for Seth Low in 1897 and 1901; for two years one of the chief assistants in the office of Corporation Council Rives, and winning the commendation of Supreme Court justices by the manner in which he has handled cases for the city.

OLD ISSUES NO LONGER AT THE FRONT.

Never before—to repeat—was there a situation like this in New York,—not two years ago, when all the regular organization rank and file, Brooklyn as well as Manhattan, stood shoulder to shoulder against the shock of a disgusted and

infuriated public hurling itself at the municipal corruption within the Tammany "square." There is no fury now at the Red Light cadet shame, for the Red Light cadet has had his commission canceled by Police Commissioner Greene. There is no "brass check" to inflame the indig-

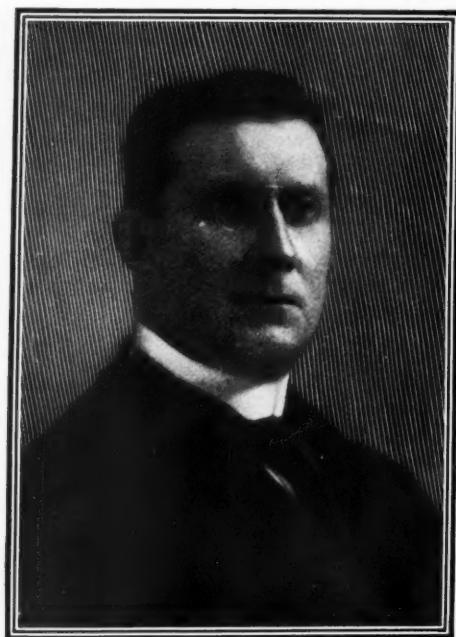


Photo by Falk, New York.

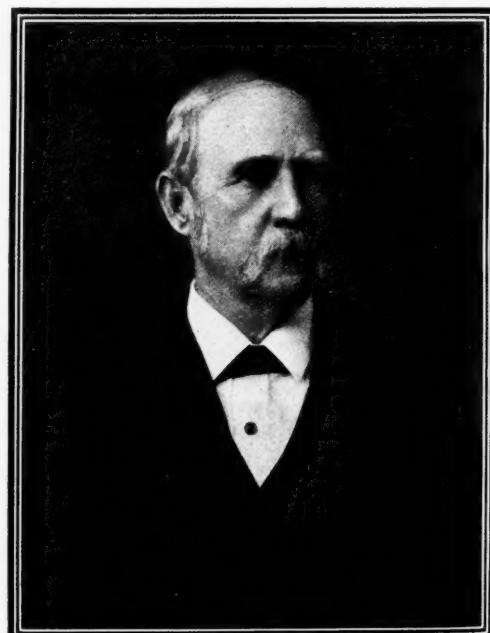
MR. CHARLES F. MURPHY.

(The leader of Tammany Hall.)

nation of honest men, as Jerome inflamed it in 1901, with that eloquent token of a badge that tagged women and young girls into a bondage of harlotry, "Kept submissive there by the police;" for the slaveholders who lived on their loathsome earnings threw away all the brass checks as Jerome pursued them into State prison. There is no impassioned cry for the suppression of the copartnership between municipal officers and gamblers, policy men, keepers of brothels and dives, which were only the shield for crime; for blackmail and Graft and division of those base wages have been suppressed by the Low administration. There is no towering rage of righteousness to sweep away the evil that was flaunted everywhere, for the evil is gone.

Alas! on the contrary, there have been murmurings at the zeal of officials who were over-stiff-necked in the performance of their public duty; discontent with the somewhat stupid con-

scientiousness which, eager to do its work, tore up an important thoroughfare in Brooklyn,—for example, Fourth Avenue, from Fortieth Street to Flatbush,—to achieve the praiseworthy purpose of making it beautiful with landscape gardening and parks along its length, and has kept it impassable till shopkeepers have lost their business, many of them, and some of them been ruined; resentment by respectable Germans, who have been told it was criminal for them to buy beer in beer gardens on Sunday,—something they had done without discredit or comment through untold generations; uneasiness by taxpayers, who fear that the increased assessment valuation of real estate may come to mean increased tax payments, which it has not and will not unless municipal expenditures are made with extravagance; mutterings from the pushcart peddlers (there are thousands of them), who have been butted from pillar to post by the policemen now alive to the regulations of the department,—there are all the dissatisfactions (many of them due to the unwise methods of petty but self-important officials) of the variable natures which quickly forget past evils of hideous aspect in the contemplation of slight irritations that are present; for the average man, as Thomas B. Reed loved to remark, will go wild over a little sand that is actually in his shoe at present and never



MR. HUGH M'LAUGHLIN, OF BROOKLYN.
(Democratic leader of Kings County.)

worry at all over the damnation of his soul that is remote.

THE FIGHT TO "KEEP THE GRAFTERS OUT."

But the Fusion workers rely,—and they thank Mayor Low for the strength of their Rock of Reliance,—on their cause, the cause represented by the evil that has been suppressed and banished, and that they proclaim cannot return unless there returns to the mayor's office a Tammany official representing what the Fusion forces have made the keynote of their campaign—Graft.

No Fusion worker doubts that with Mr. McClellan in the Mayor's chair there would be, despite his amiable but somewhat flabby personal respectability, a restoration of the reign of Graft. Van Wyck was a gentleman by birth, as is McClellan, and the Graft operations under Van Wyck's administration, they point out, became a debauch so gross that it shocked New Yorkers from habitual indifference to a political revolution that was little short of frenzied. They have no doubt that Graft would become paramount, under the Boss absolutism of a Murphy, as it was under the Boss absolutism of a Dick Croker, a John Kelly, a Bill Tweed, a Fernando Wood, a John Bingham, an Aaron Burr,—the dynasty stretches back a century. McClellan, as a minor official of the former Brooklyn Bridge Commission, as presiding officer of the Board of Aldermen in the old city, and as a Representative in Congress since 1897, has had a clean, if a colorless record, yet no Fusion worker, Republican, Democrat, or Independent, believes that it would be possible for him, under the Tammany system, to be more than a figurehead for the Tammany absolutism of Murphy, if he is to be supreme Boss, *de facto*; of Richard Croker, if Murphy is but his proxy.

THE CALIBER OF TAMMANY'S LEADERSHIP.

That one outside the atmosphere of New York may understand, the extreme differences between the opposing forces in this campaign as well as the wide natural variances between the Fusion elements here, there must be placed in contrast with the typical Fusion workers uniting for the election of a man whom they do not admire personally—Cutting, the gentleman born and bred; Jerome, the lawyer and judge, of high education and honored lineage; General Greene, the soldier and man of affairs; Major Woodbury, the army surgeon and college graduate; Corporation Counsel Rives, the respected lawyer; Tenement House Commissioner De Forest, the philanthropist and scholar,—not to mention others of the long list and the same standard,—must be placed in contrast the Tammany cap-

tains who will seize the places, must seize the places under the Tammany system, of those other irreproachable citizens if Mr. McClellan is elected mayoralty deputy for the Boss absolutism of Tammany. Contrast, too, the transcendent importance of these professional personalities in whose fierce political light the Tammany candidates, from the highest to the lowest, shine thin and pale.

Although the German population now outnumbers the Irish population of Greater New York, and although the foreign population coming from Europe proper outnumbers the Irish nearly two to one, about 90 per cent. of the Democratic Assembly district leaders in the boroughs of New York City are either native-born Irish or sons of Irishmen. German leaders in Assembly districts are not only few, but they rarely survive the Tammany primary contests. Only two of the sixty Assembly district leaders have a college education. About 20 per cent. never had a common-school education, except in the primary grades.

But the Tammany leaders and their organization fellows in Brooklyn are men of extraordinary natural capacity, and of long and tried experience in bending and holding large followings of men to their will and their uses. Able and successful are they from the James Kanes in Kings County, the John Morrissey Grays, and the William R. McGuires, to the three big men of Brooklyn, Hugh McLaughlin, James Shevlin, and Patrick Henry McCarren, who have been the center of the savage conflict between Tammany Hall and "Willoughby Street,"—as the McLaughlin organization is locally designated. It was the McLaughlin-Shevlin Boss-ship which denied the right and the power of Murphy to name the whole city ticket and to force Grout and Fornes down the throats of McLaughlin Democrats. It is McCarren, on whom Murphy has relied, the one-man ticket having been named, to flog the McLaughlin Democrats into the Tammany harness. Hugh McLaughlin, the Richard Croker of Brooklyn for thirty years, from a job in the navy yard to politics as a member of the "White House Gang," and then its leader by virtue of his physical prowess; a hunter and fisherman for sport; for business a peacemaker within the organization when possible, the strictest sort of disciplinarian when harsh measures were necessary; possessed of a fortune, the lowest estimate of which is seven millions, the highest fourteen; owning more improved and unimproved property in Brooklyn than any six other men, probably the largest holder in that city of telephone, electric light, and gas stock, yet never owning a carriage and taking his most expen-



MR. JAMES SHEVLIN, OF BROOKLYN, HUGH M'LAUGHLIN'S
CHIEF LIEUTENANT.

(Mr. Shevlin stands at the left.)

sive ride, except to a funeral, on a trolley car;—James Shevlin, the “workingman” in the organization, known as the Sphinx, advancing from his first job as a fighter on the frigate *Constitution* in the Civil War to the wealth of a millionaire, though he never held any political office except that of warden of the penitentiary twenty-five years ago, but having had personal charge of the organization in all the details of government that apply to party politics in respect of franchises or contracts;—Patrick Henry McCarren, who went from a cooper's shop to politics with his first vote, and who now is six feet tall, sallow, of light weight, clean-shaved, and with a cowl would make a typical monk of centuries gone by. He has been in the Legislature twenty years, at a salary of \$1,500, and has had no other visible sources of income until recently, when, with Tim Sullivan, he bought interests in local race tracks.

TYPICAL DISTRICT “LEADERS.”

In New York City, the men regarded as of the largest brain power, overshadowing the Tammany candidates beyond measure, are James J. Martin, Timothy D. Sullivan, George W. Plunk-

ett, Patrick Keenan, Charles F. Murphy, and William Dalton. These men have grown up from nothing, absolutely nothing—unless clerkships in Tweed's time may be regarded as having had some value—and they are to-day all above the necessity of hard work, in a money sense, and above the necessity of any work.

Martin was a car conductor before he got a small job in John Kelly's time. Then, by the force of his own personality, he went by easy stages to the office of police commissioner, but long before that had been known as Tammany Hall's lobby man. Since the going out of Gilroy, Martin has been regarded as the shrewdest man in Tammany Hall. He never talks for publication. He will always help a friend, whether it is to get him into a public office or a job in a printing shop. Accurately, it is believed the ill success of Croker came only when he pushed Martin aside as an adviser and took less astute men into his confidence.

Tim Sullivan's whole success has come from doing things for his constituents and standing by anybody, criminal or not, who is a member of his party, to the very extreme. From a newsboy he became a Bowery politician, then a member of the Assembly, and a Senator. Now he has gone to Congress for some object as yet unknown; but as he has made Representatives in Congress for twelve years, it is not ambition or love of the place that has sent him there.

Sullivan gives away money faster than many men can make it, yet since he ceased gambling he has become a millionaire. He is a large race-track stockholder, has an interest in four theaters, is a large property-holder, and an owner of stock in transportation companies.

In a financial sense, Sullivan was down and out when the Van Wyck administration came in, but in four years he had easily reaped a half million dollars because of his autocratic control of the police on the East Side of the city.

George W. Plunkett has accumulated a million in twenty-five years of political life, and probably would have twice that sum, only that he has found it necessary to expend about 50 per cent. of his income to produce and keep the other 50 per cent. He has fought every central leader in authority and kept possession of his Assembly district. He gets down among the women and the children as well as the men. He obtains small contracts for small men, and takes big ones for himself. He starts men in liquor saloons, and takes notes over a long period of time in payment. He helps widows, and has his charities well advertised. He is a politician waking and sleeping. He expends ten cents a day on a “shine,” except on Sundays, and wholly for the

purpose of holding his office on the bootblack's stand, where he is to be found at a certain hour every day. His office, when not there, is in his hat. He regards all laws that interfere with his friends as bad laws.

Patrick Keenan, never seen waking or sleeping without a smile, has held office for thirty-five years, and, like the others, has accumulated a handsome fortune. He is an Irish leader in a district made up almost wholly of Jews, Austro-Hungarians, Swedes, Germans, and a sprinkling of Irish. He is not the only leader who has that sort of district,—as, for instance, P. J. Scully, Florrie Sullivan, and Tom Dunn.

William Dalton became a politician as a small butcher, became a greater one as a liquor dealer, caught the friendly eye of John Kelly and the commendation of Hugh J. Grant when mayor, and, thus intrenched, easily became the leader of a district.

MURPHY AS CHIEFTAIN.

Charles F. Murphy, now the supreme Boss or regent for the Croker absolutism, from the ice wagon to the liquor store, with the poolroom

overhead, with a brownstone house, and to the leadership of Tammany Hall, only followed the footsteps of others. His ability to say yes or no, to keep his word, and to back up his opinions with his fists, made him to be thought something of when he was a bartender. When he had a following on a street corner he became useful to former Senator Hagen, then district leader; and when he came into possession of two liquor stores, and then three liquor stores, his following was big enough to make Richard Croker cast his eye upon him occasionally, and to make him the successor of Hagen when that much loved person in Tammany Hall died suddenly.

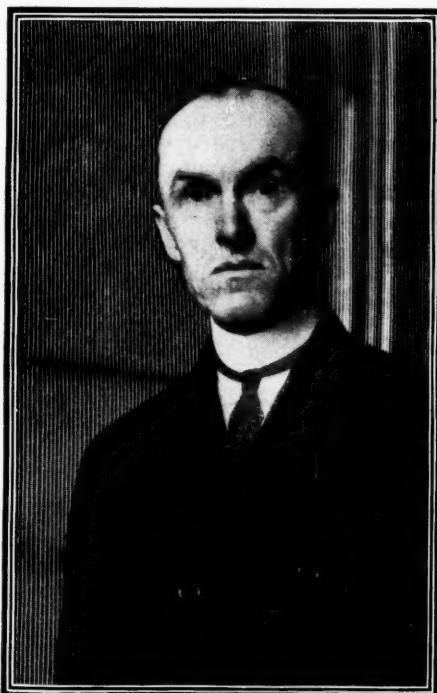
Murphy is shrewd, silent, and aggressive. Money stays with him. He has a long row of tenement houses on his list. He prefers a street corner to his clubroom when he wants to talk to lieutenants. He has a direct way of making known what should be done, whether it be in an election district or in the whole Assembly district. He believes in organization, from the tenement house to the whole block, and from the whole block to the four sides of his district.

CAMPAIGN METHODS.

So the opposing forces are ranged with one more unusual feature,—a campaign compressed by reason of the late and sensational change in the tickets into three short weeks, but with close, sharp fighting of cavalry-charge swiftness and rapid-fire-gun intensity; with nightly mass meetings in great halls and parks, "cart-tail" speakers at the street corner, the Citizens' Union conducting an enormous output of dodgers, circulars, and other campaign literature, and a steady volume of cartoons distributed from house to house; with every fence a campaign billboard, and every surface and elevated car a "display position" for poster, motto, verse, and epigram bearing on the campaign watchword of "Graft;" and with Tammany Hall, by reason of its lack of press support, employing newsdealers to smuggle Tammany literature into the anti-Tammany newspapers which are sold to Fusion readers.

SOME CRITICISMS OF "THE REFORM ADMINISTRATION.

Now revert once more, for it is a consideration of moment, to those faults and errors of the reform administration before mentioned, for with all the strong elements of Democratic leadership there is not a question that a large minority, if not actually a majority, of the Democratic party would prefer not only different men, but a constantly ascending scale of good government, if the changing of administrations would still keep within the city what those Democrats hold to be an atmosphere of liberality not



From the N. Y. Tribune.

HON. PATRICK H. McCARRAN.

(Senator McCarran has headed Tammany's "invasion" of the Brooklyn Democratic organization.)

necessarily in violation of the law in carrying out or interpreting the statutes or local ordinances. It has been the misfortune of reform movements that the men elected to carry out the will of the voters while honest, frequently have been either narrow-minded or unpractical in office. The Germans indignantly cite an illustration in the enforcement of the excise law. The Raines act closes the liquor saloon on Sunday, but permits the Raines law hotel to remain open, so the place which has the ten requisite bedrooms may remain open and serve meals, while the liquor saloon without those rooms must, under the law, be closed.

THE EXCISE QUESTION.

The most strenuous endeavors of the Police Department under Mayor Low, the German-Americans have contended with indignation and bitterness, have been aimed at a great proportion of the German population, who, in districts of great area, as in Williamsburg and in the Bronx, have caused to be built commodious halls where they may have their saengerfests, their bowling alleys for themselves and their wives, and their gardens where they may meet their old friends from over the sea, with their wives, over a glass of beer or Rhenish wine on Sundays. The police have harassed the proprietors of those places, they charge, as if the proprietors were the promoters of all vice in the metropolis; have outraged the feelings of the Germans and their families and practically have forced them to give up old associations. Men accustomed to do as the Germans do in the big halls of Brooklyn and the Bronx, and along lower Second Avenue in Manhattan, incensed by this illiberal construction of the law, are likely to forget the old evils of Tammany or the evils that would follow a return to power in the resentment which they feel against an administration which regards, through its police force, as the Germans see it, a glass of beer in wholesome surroundings on a Sunday as a crime requiring reprisal by the city government.

THE TENEMENT HOUSE AND BUILDING DEPARTMENTS.

The administration of the new tenement-house law, in some respects, has caused more dissatisfaction than the administration of the excise law. Good that never can be counted undoubtedly has been done by the honest administration of this law in filthy tenements. Lives far into the hundreds have been saved by forcing heartless and greedy landlords to put in the commonest sanitary arrangements in houses holding many families; but these tenement inspectors, with an

excess of zeal that was Calvinistic, have gone into the private houses of modest persons, from a worldly point of view, who had sublet, into the three-story flat houses of men who, by years of sacrifice, have scraped enough together to live in one flat and let two others, and have, under the law, forced them to carry out in every detail, at unexpected cost, all the requirements of a law which was meant to be enforced in whole, eventually, but in whole at first in those sections of the city where humanity dictated their rigid enforcement. The law being new, those who have suffered in this manner say a practical administration would have given plenty of notice to all houses of any violation and a liberally limited time to make them. In many known cases, men having ownership of tenement houses or three or four story flats, with mortgages thereon, have been compelled to make second mortgages in order to carry out the sweeping provisions of the law. The cost to many a householder has been as high as \$200, where sanitary safety for the time being, with a proper interpretation of the law applied to the circumstances, could have been had for small cost.

Likewise, ill feeling for the Fusion cause has been aroused by the Building Department. Under Tammany builders had license and liberty and anything, perhaps, that they wanted which money could buy or political influence bring. The shaving down of this thing was a necessity for the city, and something which the people voted for in turning Tammany out, but now fault is found that the men in charge of the Building Department have gone to the other extreme, and they have interpreted the law to the dotting of an i and the curl of a comma, and to such an extent that builders are harassed in regard to the smallest technical violations, and are compelled to journey themselves to the complaint clerks of the department in the several boroughs of the city.

OTHER HANDICAPS.

The public improvements have been well planned, let at the lowest contract price, prepared without any division of the spoils, and carried on as a man would carry on his private business,—that is, these things have been done to as large an extent as is possible under the direction of any city government, but there have been mistakes which have aroused the vexation and anger of many citizens. To pave a street, the whole street has been torn up along its length. To build a parkway, the whole avenue has been opened, destroying trade, preventing vehicular traffic, exasperating citizens, while having the object in view of making a record

for swiftness and dispatch in the work of improvement.

Of course, the cutting down of the mayor's term from four years to two years by Thomas C. Platt has done more to endanger the good results of a Fusion administration than anything else. The people who have been exasperated by all sorts of narrow interpretations of the law, as they deem them, are having their places taken by others who see the great good that is being done and the wholesome growth of the city, but the latter people might not be numerous enough in the short two years of Fusion to fill and overflow the ranks of those who have their personal objections to a continuance of this sort of government.

Then there is the more serious thing, unless you can get deep down in the campaign under the minds of the people, and overcome the Tammany lies by driving home the truth and the cause of it. The failure to better the water supply in large sections of Brooklyn and in northern Manhattan and in the Bronx has exasperated persons who have not gone into the reasons for delay, and who are impatient because well-laid engineering plans are being considered, and who forget that the cause of their misery is not the neglect of the Fusion administration, but the robbery of the city treasury in the past by Tammany Hall.

SCHOOL ACCOMMODATIONS.

Then, again, there are the schools. The man whose child is on half time does not always stop to think of the fact that as many were on half time under Tammany, and that with a proper administration of past affairs this would not have happened. Nor do they stop to think, unless it can be brought home directly to them by some one or some paper in which they have confidence, that the Fusion government, in a short twenty months, in spite of the building strike and the delay in getting material, has almost completed enough schoolhouses to put every child on full time, and, by the grace of Sam Parks' Building Trades Council, will, if continued in power, have a seat for every child under the contracts already let, within fourteen months, and seats for seven thousand more children within six months! A misunderstanding of these conditions undoubtedly will have effect in many districts of the city, which again makes clear the political crime committed in shortening the mayor's term, for undoubtedly, if the present mayor's term were four years, all the

criticisms as to schools and water would be convincingly removed, and long before that period a clean police force would permit sanity in the administration of other laws.

THE REAL STRENGTH OF THE FUSION CAUSE.

Yet if it would be foolish to ignore those influences which cast weight, each a little, perhaps, but none the less some weight, and all a very considerable adverse power against the Fusion movement, there is none the less a confidence among the cool and calculating,—Democrat as well as Republican, Abe Gruber, the cunning professional, and Cutting, the frank idealist,—that the Fusion cause will prevail because New York, as a population mass verging on four million souls, has come to accept the principles of the Fusion cause as against what is its conviction is the primal instinct and the absorbing passion of the Tammany absolutism—Graft; and because New York trusts Mayor Low absolutely, though he be not personally popular, to continue an administration not only clean and decent, but efficient and economic, while an establishment of the Murphy rule would be a restoration, in some other form no doubt, but of the same spirit and purpose, of a new Graft cabinet like the Forty Thieves' Council.

That confidence is based upon :

First, the fact, almost without precedent in public affairs, that Mayor Low has "made good."

Second, the fact, as a *sequitur* of the first, that Fusion has stood like a rock against internal disorder, demoralization, and even treason to its cause.

Third, that the newspapers of New York, both in units of publications and in numbers of readers, are ranged overwhelmingly for Fusion, there being only three newspapers supporting Tammany in Manhattan, and none at all in Brooklyn.

Fourth, that the registration shows gains in anti-Tammany and losses in Tammany districts.

Should Fusion in New York fail this year, however, through paying penalties for the mistakes that have been made,—and there have been mistakes,—and through the popular fault of forgetfulness, still would non-partisan Fusion remain a powerful force in New York and a shining star to other municipalities, to rise triumphant again after other shameful experiences of hideous contrasts, by reason of the permanence given its existence when Mayor Low, by "making good," set the foundations of a great cause in enduring stone.

THE NATION'S PRINT SHOP AND ITS METHODS.

BY J. D. WHELPLEY.

A THOROUGH investigation of the Government Printing Office at Washington, such as has been made by the direction of President Roosevelt, should emphasize certain facts.

First, that the cost of printing done by the Government is in excess of such reasonable allowance as might be made for exceptional conditions.

Second, that the establishment in detail has been largely governed by labor unions and Congressional influence, rather than by the executive head.

Third, that a lack of modern business methods has prevailed in many of the operations of the plant.

Unfortunately, this is and has been for years the real condition of the public printing establishment of the United States Government. It is the greatest print shop in the world, as it employs four thousand people, and will call this year for an appropriation of over five million dollars to meet its requirements. In justice to all, however, it must also be said that from this same shop can be turned out in the shortest time and in greatest quantity the best work known to the printing trade of any country.

WHY THE GOVERNMENT DOES ITS OWN PRINTING.

The question as to whether it is expedient or not for the Government to do its own printing is one of purely academic interest at this time. The only answer is, that the Government is doing the work, and will continue to do it. Congress would never consent to a change involving, as it would, the abandonment of a great plant, the doing away with a large department of government work and its attendant patronage, and the disappearance of many privileges now granted to members in connection therewith.

The advocates of a government print shop assert

that under no form of contract could the peculiar character of work now carried on be accomplished successfully. They point to the irregularity, the speed required, the great number changes made in form and copy, and the secrecy necessary to be maintained in connection with a great part of the printing. It is also asserted that in the comparisons of cost made between the work done by the Government and the bids of contractors many points are not taken into consideration, such as quality of the work, quality of the material used, the interchangeability of forms, headings, etc., and, above all, when estimates are asked of contractors, they make the figures with the understanding that they are not to get the work, but are merely furnishing the figures for purposes of comparison.

Those who believe that the Government printing could be done by contract to the better advantage of the taxpayers assert that all these obstacles could be overcome, and that the advantages which might be allowed as pertaining to a government institution are more than offset by an increase of cost ranging as it does from



SECTION OF PRESS-ROOM, NEW GOVERNMENT PRINTING OFFICE, WASHINGTON, D. C.

30 to even 100 per cent. above that which would be incurred by letting the work to private parties.

Such a discussion is useless, however, as the Government Printing Office has come to stay. It only remains to determine as to whether or not it is economically and properly administered, and, if not, to see that it is. This is what President Roosevelt has determined to do, and will do so far as his power may extend.

HOW THE SYSTEM GREW UP.

The present system of public printing is the result of over one hundred years' consideration of the matter by Congress, progress being marked at many stages by bitter political and personal controversies, some of them the most notable in the history of the national legislative body. The first reference to public printing is found in the *Annals of Congress*, now called the *Congressional Record*, in a report presented in the first session of the First Congress, recommending that proposals be invited for printing the laws and "other proceedings." It is now presumed that this included the printing of bills, resolutions, and other Congressional documents. In 1794 is found the first specific appropriation for public printing, for Congress then set aside ten thousand dollars to pay for "firewood, stationery, and printing work."

During the succeeding years the printing seems to have been done in a haphazard way, partly by direct appropriation and partly under incidental allowances. In 1818, in the Fifteenth Congress, a joint committee of the two houses was appointed to report whether any further provisions of law were necessary to insure "dispatch, accuracy, and neatness" in the printing done for the two houses. This committee, after visiting various cities and investigating the subject, made an elaborate report, and in this report is the first official suggestion in favor of creating a national printing office as the best and most economical method of doing printing for the Government. It is interesting to note that this suggestion was not adopted until fifty years later.

That report intimated, however, that it was doubtful whether the work could be done in this manner as cheap as through some other channel, but the committee insisted that there was no question as to its being the best way to secure the kind of work wanted by Congress. The estimated cost of such a printing office was sixty-five thousand dollars a year. In 1819, a joint resolution was adopted regulating the public printing. This resolution was passed as a result of the great delay and inaccuracy in the

printing done, which became such a serious matter as to materially hinder the legislative bodies in their work. Numerous changes were made in the printing laws between 1819 and 1852, and it was in the latter year that Congress adopted a general law upon the subject involving a radical change in the system, prices, and methods of executing the work.

The present printing law still retains many features of the law of 1852. It was under this law that the office of superintendent of public printing was created. The law of 1852 was considered a decided improvement over that of 1846, but the printing done under its provisions was very expensive. One great difficulty was the want of a building with proper facilities for doing the work. The demands made by the Government increased to such an extent that up to 1856 no single printing office in Washington was capable of handling it all, and the result was that a variety of styles prevailed in the forms used, producing general dissatisfaction and inconvenience.

No session of Congress closes without a more or less acrimonious debate concerning the Government printing. The controversy between those who favor a government establishment and those who believe that the work should be done by contract has raged from the First to the Fifty-seventh Congress; and as there is no probability of the institution being abolished, it will continue to rage so long as members seek topics for discussion.

In 1861, the Government purchased, at a cost of one hundred and fifty thousand dollars, what is known as the old Government Printing Office, now used as a part of the new establishment, and in this building has been done all the Government printing of the past forty-two years. When the Government moved into its new quarters, in 1861, there were three hundred employees upon the printing-office rolls. The office of "public printer" was created by a law of 1876, and it was also provided that it should be filled by appointment by the President, "by and with the advice and consent of the Senate."

VASTNESS OF THE PLANT.

The first year the Government occupied a building distinctively set apart for the conduct of its printing business the operating expenses amounted to something over five hundred thousand dollars. The cost of the public printing grew, therefore, in over sixty years from about ten thousand to over half a million a year, and has grown in the last forty years from the half-million mark to ten times that sum. Some idea of the growth of this institution is shown by the

fact that when the first government printing office was established 60,000 square feet of floor space was sufficient, whereas at present 377,200 square feet is none too much to give all branches of the work ample quarters.

The employees now number nearly four thousand, about one-third of whom are women. The entire establishment is conducted upon an enormous scale. As to the size and extent of the plant, the number of people employed, and the material consumed, there is no printing office in the world which approaches it in any of these particulars.

Germany and France are among the large countries which do their own printing. England does hers by contract, and the officials of the Government Printing Office in Washington take great satisfaction in comparing the English Government stationery, printed on inferior paper and showing inartistic workmanship, as evidence that the American way of doing is by far the best. Some of England's colonies, however, do their own printing, Canada especially having a printing plant of considerable size and modern efficiency. New South Wales is another colony which also maintains a government printing office. As stated, however, no public or private institution anywhere in the world approaches in size or facilities the one in Washington.

Here there are always a million and a half pounds of type in stock, and yet this is not considered sufficient, for at least two hundred and fifty tons are always tied up in live standing matter on the galleys. The payroll of the establishment approaches three and a half million dollars. The proof-paper alone consumed in the composing room costs twenty-five hundred dollars a year. Over forty thousand pounds of printing ink are used in twelve months, and ten tons of roller composition are necessary to keep the presses in good order. The paper bill, of course, is the largest supply item, and amounts to over eight hundred thousand dollars a year, which means a daily average of about fifteen tons of paper and cardboard. These figures, however, will convey but a vague impression to the mind of the layman. Only a practical printer can understand the amount of work which must be done to consume this enormous aggregate of material. It may be said, however, that during the past year 1,648,214 bound volumes figured as a formidable part of the output.

THE NEW BUILDING—A MODEL BUSINESS STRUCTURE.

The growth of the buildings now occupied by the Government Printing Office tells the story of the increase of the work done. The first

building acquired by the Government, in 1861, was a four-story structure, then considered large; and in 1896, Congress provided for a new seven-story annex, 27 x 169 feet; and within the past two months the printing plant proper has been moved into a new seven-story, fireproof building, which has a frontage of 408 feet on one street, 175 feet on another, and 278 feet on the alley. This new building cost about two and a half million dollars. It is as absolutely fireproof as modern science can devise, and is equipped with a power plant which operates five hundred electric motors.

There is no shafting or belting employed anywhere in the building, and the electric plant has been pronounced by experts, considering the variety of uses to which the power is put, to be the finest in the world. Owing to the immense weight to be carried by the walls and floors the maximum strains were provided for, and the foundations of interior columns and walls are pyramids of concrete extending to bed rock. The new building rises to the height of 125 feet. The architecture is of the Italian Renaissance, modernized. Six thousand tons of steel were used in the framework, and nearly fifteen million bricks were required to enclose the walls. The floors are so constructed as to carry a load of three hundred pounds to the square foot. Every machine operated in the building has its own motor, the electricity being carried in the floors. Between the floor and ceiling spaces are conduits for this purpose, the floors themselves being built of solid brick arches and hollow tiles.

All the window and door frames are of iron, as are also the baseboards, so that, with the exception of the floors themselves, which are of hard maple laid in asphalt, there is absolutely no wood about the building. The walls of the building are devoted wherever possible to window space, there being nine hundred windows in the structure. The plumbing, heating, and ventilating systems are of the most modern character, and fifteen elevators for passengers and freight are to be found in various parts of the building. The provision made for the comfort of employees in the matter of lavatories, drinking water, and other necessities are most complete. In fact, the entire building as it stands can be regarded as the most modern business structure in the world.

UNCLE SAM'S PRINTING—RECORD PERFORMANCES.

The character of the work done in the Government Printing Office covers almost every conceivable phase of the typographical art. It ranges from the printing on sheepskin of a single

copy of an important treaty to the issuing of some report contained in a score or more of large volumes. It also includes the publication of what is practically a daily newspaper in the shape of the *Congressional Record*. Secrecy, as can easily be understood, is often an important factor in the handling of government work, yet with the hundreds of confidential reports, President's messages, treaties, and other documents of like character which pass through the hands of the responsible men in the employ of the Government Printing Office, there is yet no story to tell of any great leak.

There have been occasions in the past where certain documents have appeared prematurely in print, but in each and every instance the leak has been traced to men outside of the printing-office force. Numberless stories could be told of record occasions when publications of great importance and great volume have been issued from this printing office at short notice. One or two will suffice as an indication of what can be done in this magnificent plant operated by its thousands of employees.

In 1899, the President of the United States sent to the Government Printing Office, accompanied by a short message, the report of the Naval Court of Inquiry upon the destruction of the *Maine*. When printed, that report contained 298 pages of text, 15 x 7 inches, twenty-four full-page engravings, and a four-color lithograph. It was not until 3 o'clock in the afternoon that the shop got the originals of the illustrations, and it was after 6 o'clock that night when the manuscript of the text reached the foreman's hands. Before Congress assembled the next morning a complete copy of this bulky volume, bound in pamphlet form, was upon every desk in the Senate and House, containing, as it did, the illustrations, lithograph, and text as perfect as if a job printer had been given a month in which to do it. That is to say, a thousand copies of a book of more than three hundred pages were manufactured in sixteen hours from the time the manuscript reached the foreman's composing room.

On another occasion, at 4 o'clock on a Saturday afternoon, the office received the manu-



THE NEW PUBLIC PRINTING OFFICE.

script report of the committee which investigated hazing at the Military Academy at West Point. By 9 o'clock Monday morning each member of Congress had on his desk a volume containing two thousand pages, or the committee report in full.

Two years ago, the record was made in the printing of a bill which was no other than the revised statutes of the District of Columbia. This bill contained three hundred pages, and was ready for delivery to the White House for the President's signature ninety minutes after the copy reached the printing office.

All original laws and a few other important documents are printed upon sheepskin parchment. The copies of the laws are then filed in the State Department. It is only when they are printed in the form of statute books, however, that the book plates are made to be preserved in the vaults of the office. The composition upon the *Congressional Record* begins at 7 P. M. each day Congress is in session, and the proceedings of the day before are issued from the printing office in time for a 6-o'clock mail delivery the following morning. The *Record* varies from an issue of four pages to, perhaps, one hundred and fifty pages; but no matter what its size or character, it must be printed and ready for distribution within the hours named. The copy comes in a most irregular way, and the *Record* is printed upon a special press built for that purpose. Thirty-two pages can be locked on the rotary frame of this press, which has a feeding capacity

of sixty thousand sheets an hour, and four hours after the first sheets come from the presses fifteen thousand copies of the *Record* will have been bound and made, this being the size of the regular edition.

Every moment during the night the foreman of the composing room must be prepared for any emergency which can possibly arise. If there happens to be a night session, and about 10 o'clock a Congressman addresses the House, and in the course of his speech introduces some government report which he requests shall be included in the *Congressional Record*, this report is just as much part of the proceedings as the speech itself, and it may run anywhere from a thousand to fifty or sixty thousand words. Perhaps, after this has all been put into type on a rush order, the member of Congress may request that his remarks be held for revision, or he may conclude to leave out part of the matter put in type. This is true not of one Congressman only in a day or night, but a dozen Congressmen might adopt the same course. In the reports of the proceedings of the first eighteen Congresses each one fell within a limit of two million words. The proceedings of the last Congress, which are comprised within the seventeen thousand pages of the *Record* printed during that period, make many volumes, and each volume contains as much or more than the record of an entire session of earlier days.

OFFICIAL RESPONSIBILITY.

The head of the Government Printing Office is the public printer, Mr. Frank W. Palmer. The printing office is an independent bureau of the Government, the public printer reporting directly to the President and being responsible to no one else. The principal officers under him are the chief clerk, Capt. H. T. Brian, who has an honorable record of several decades in various capacities, and the foremen of the mechanical departments. The Department of Commerce and Labor has conducted the investigation of the printing office ordered by the President, and it is expected that within a short time it will also be one of the bureaus included within the permanent jurisdiction of the new department.

Some of the abuses which have arisen are due to the entire independence of this bureau in the past. The President of the United States is unable to give much attention to details of government work. The public printer, therefore, was an officer of considerable importance and almost unlimited authority. He was in a position where he could do very much as he pleased, the President being compelled to leave practically every-

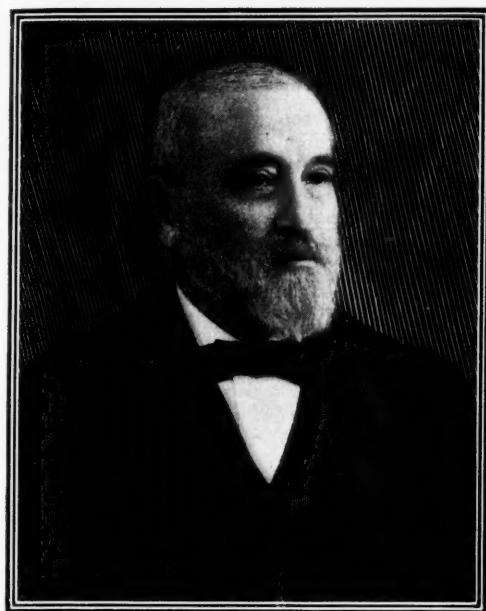
thing to him. The only other power with which he dealt was the joint committee on public printing. This consists of three members of the Senate and three of the House, meeting together as a joint committee, and presided over by the chairman of the Senate committee, who at present is Senator Platt, the senior Senator from New York.

The law governing the printing office is peculiar in many respects, one of the provisions being that the joint committee should let all contracts for advertising, and make all contracts for the purchase of paper. It is at the time these contracts for paper are to be made that the Congressional committee shows its greatest activity. It lies within its power to reject any and all bids, and upon it devolves the responsibility for every feature of this important outlay for the Government printing. In all the investigations so far, there has been no testimony to the effect that any of these contracts for paper have been let in any way other than that contemplated by the law, and it is considered doubtful whether a detailed investigation into this feature would disclose any irregularities, with the possible exception of the favoring of some constituency for political reasons. It can be said, however, that while there have been numerous demands made for an investigation of the letting of these contracts for paper, so far, at least, no tangible evidence has been forthcoming that there is any wrongdoing in connection therewith.

It is stated by the printing-office officials that the interest of the joint committee in the conduct of the institution is largely perfunctory, except in regard to these contracts for paper. There is, however, a point of contact where the members of Congress become particularly active, and that is in the matter of promotions. This brings up the question of labor,—a most important one, and in which is involved the most undesirable feature of the conduct of this great business.

THE QUESTION OF UNION LABOR—THE MILLER CASE.

Public attention was first drawn to the labor question in government employ by the publication of a letter received by W. A. Miller, a bookbinder in the employ of the Government Printing Office. This letter was written to him by the public printer, and in it he was notified of his discharge on the ground that as he had been dismissed by the bookbinders' union, he was no longer acceptable as an employee of the Government Printing Office. This matter was brought to the attention of the Civil Service Commission,



HON. FRANK W. PALMER, THE PRESENT PUBLIC PRINTER.

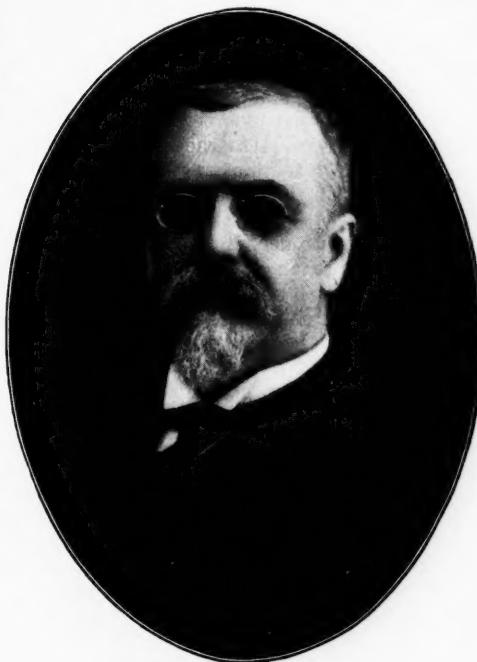
and finally to that of the President, and as a result of an investigation, President Roosevelt wrote a letter which is notable as being a definition of the attitude of the administration toward all government employees.

This letter of the President's, expressed in forcible terms, laid down the general principle that the Government could not differentiate between union and non-union labor, and that so long as a man obtained his employment through the regular and accepted channels, and was satisfactory to his employers, it was no concern of the Government as to whether or not he was a member of any labor organization. Miller was at once reinstated by the President's order, and is still an employee of the office. Charges of a personal nature have been preferred against him by the union employees, and these have been investigated solely to determine his personal fitness for government employ and association with his fellow-employees. The case will be decided on its merits along these lines, although it is understood at this writing that the offenses charged are not of sufficient importance or of sufficiently recent date to cause him to lose his position.

The Government Printing Office has always been accepted as a union or "closed" shop, and some of the officials are inclined to maintain that it is still so. This opinion, however,

is in the face of strong opinion to the contrary, held by officials of greater authority, and also contrary to the intent and purpose of the administration.

In a thorough investigation which has been given this matter, it has been found that since the civil-service regulations went into effect there has been very little abuse of the appointive power. When a man is wanted for the printing office a call is made upon the Civil Service Commission. The names of the three highest eligibles on the list are sent to the public printer. From these three he chooses one. There is no doubt but that if an influential member of Congress has urged the appointment of a certain man, and his name is among these three, that he has been made the first choice. Under

CAPT. H. T. BRIAN.
(Chief Clerk Government Printing Office.)

the rules of the commission, however, the names of the two rejected applicants go back again to the public printer in the next draft, hence the time must come when they must be seriously considered for an appointment.

If among these men drawn there happens to be a non-union man, it has been found that he rarely outlives the probationary term of six months unless he was gathered into the union fold and thus complied with union requirements.

It is in the matter of promotions and reinstatements that the Congressional influence enters largely, and there have been, undoubtedly, very serious abuses of this power. The record of the office for the past few years in this respect is exceedingly bad, and it is a matter which is extremely difficult to control owing to the absolute authority given to the official in charge of the office and the absence of any detailed regulation enforcing a merit system.

It can be accepted as a fact that the Government Printing Office has, up to the Miller case at least, been a union or "closed" shop, notwithstanding such exceptional cases as might be cited. That it will not be in the future is the determination of the higher administrative officials of the Government. The Miller case serves as a precedent. Since that episode no non-union man has happened to have been drafted for employment. By the time Congress gets under way, however, several hundred new employees will be taken on. It is expected that a number of these will not be members of labor unions. There is no objection to their becoming such; but if they elect to the contrary, they will be fully sustained in their positions so long as they and their work are acceptable. The theory upon which the Government Printing Office is to be transformed into an open shop is in effect that the number of non-union employees will, within reasonable time, so increase as to give that element a feeling of greater safety and security in their positions, and thus prevent any discrimination. The oldest and best-informed men in the shop do not believe that under present circumstances a strike over this question is within the bounds of probabilities. The Government will not make war upon any individual or class. This is to be a peaceful revolution brought about by a definite position maintained with firmness,—at least, this is the programme. It is not entirely safe to predict results, for while success is probable, no man dare say where a well-organized and serious strike of government employees would end. It would be a conflict to be deplored.

THE GOVERNMENT WAGE SCALE.

The lowest wage paid in the Government Printing Office is a dollar and a half a day, the amount received by female laborers. The lowest wage paid to men is two dollars per day. Foreman receive two thousand dollars per annum, and the highest rate per day is to proofreaders, who sometimes make four dollars and sixty-eight cents. Employees work eight hours per day, and are allowed thirty days' leave each year, with some other privileges not common to pri-

vate employment. Night work is paid for at 20 per cent. increase of the day scale.

The assertion is constantly made that Congress fixes by law the rate of wages. This is not strictly true, for the law merely establishes a maximum, and the public printer has authority to pay less if he should so determine. The law in regard to the employment of labor in navy yards specifies that the going rate in that locality shall be the scale, and those who have looked into the matter believe that this should be the law in relation to the printing office also. The fact that printers working in Washington for private firms labor eight hours per day, and receive one dollar per day less wages, is instanced as showing unnecessary expenditure.

In figuring the cost of government work, it must be remembered that the plant is the best and largest in the world; that there are no fixed charges for rent, insurance, taxes, or interest on investment. In fact, there are no fixed charges whatever, and in the purchase of supplies the buyer has the credit of the national government behind the contract, and the advantage of dealing in enormous quantities.

COMPARATIVE COST OF GOVERNMENT PRINTING.

When printing is done for the Government by public letting, as is required by law in some instances, the Government Printing Office also bids, but it may be said never gets the job. One instance toward which public attention has lately been turned is the printing of the money-order blanks for the post office. The Government bid was about 15 per cent. higher than any private bid. The printing-office officials, however, were well satisfied with an ensuing scandal concerning the quality of the material furnished and the work done. They say that their bid was based on the requirements of a first-class job. Considering the absence of fixed charges, the Government bid was evidently much higher than would appear superficially.

NO TYPE-SETTING MACHINES.

With one exception, labor-saving devices are in use throughout the Government printing office. That exception lies in the practise of setting type by hand instead of using the machines common in every private printing office throughout the country, large or small. Of course, in this matter the influence of the labor union has been felt. The public printer asserts that these machines are as yet an untried quantity in the class of work done in his shop, but apparently no effort has ever been made to try them. It would require a Congressional appropriation to put in machines, but they could have been tried

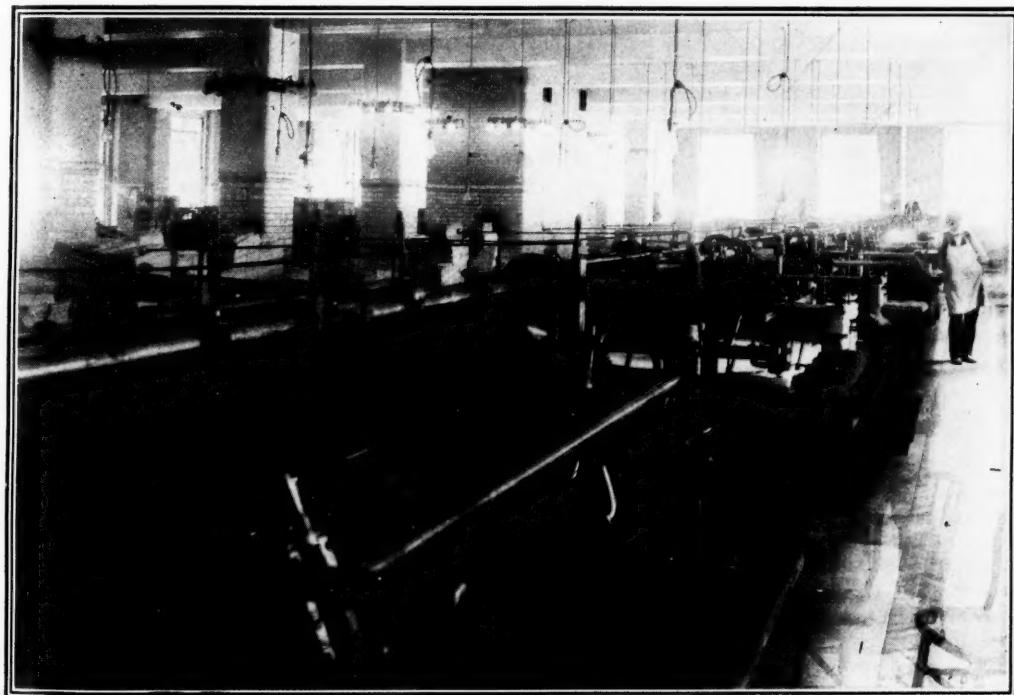
long ago without this, and their desirability determined. There is, undoubtedly, a large amount of work which could be done mechanically at a saving of time and money. The excessive cost of government printing appears to be due directly to high wages and extravagant and waste in the use of material, and indirectly to other defects in the general system.

FAULTS OF ADMINISTRATION.

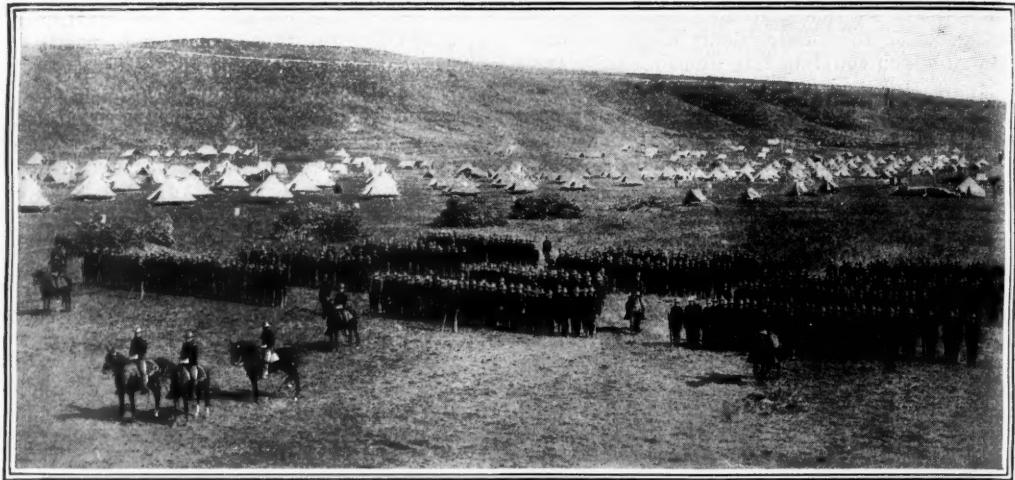
As to the general administration of the office, it has been found that questions of labor and wages have been determined by Congressional influence and that of the laborers themselves rather than by the responsible administrator. That a lack of modern business methods has prevailed in the choice of machinery, the purchase of supplies, stock-taking, waste, the distribution of work, and other details of administration is the opinion of those in a position to know and confident to judge with fairness. In all probability, however, there would be no scandals of magnitude unearthed in any investigation.

Drake 11/14/1897
The evils in the conduct of the Government Printing Office are those common to nearly all government business exposed to direct Congressional influence, carrying a large quota of patronage, remote from close supervision by a high responsible administrative authority, and are representative of the cumulative and progressive abuses of a century. As stated, however, the character of the enterprise is such that comparison with private industry is possible. For this reason the faults are more easily detected as they assume more tangible and concrete form, and can thus be more quickly and more easily corrected if this correction be desired by the powers that be.

The Government Printing Office is a wonderful and astounding institution. Great in its mechanical features, the magnitude of its output, the high character of its finished product, the number of its laborers, and their expertness and loyalty to their tasks, it is deserving of an honest, intelligent, non-political and thoroughly modern administration, conducted absolutely in the interests of the best public policy.



FOLDING-ROOM OF THE GOVERNMENT PRINTING OFFICE.



THE FIRST REGIMENT, KANSAS NATIONAL GUARD.

(This regiment is commanded by Col. Wilder S. Metcalf, Lawrence, Kan., who succeeded Funston as colonel of the Twenty-sixth Kansas in the Philippines, and who was brevetted a brigadier-general for meritorious service in the Philippines.)

THE FORT RILEY MANEUVERS.

BY PHILIP EASTMAN.

FROM the old-fashioned "Training Day," once typical of New England, when the members of the militia companies met annually at some convenient village for a few hours, company drill with flintlocks, to Camp William Cary Sanger, on the Fort Riley Military Reservation, near Junction City, Kan., where regiments of State militia joined with the troops of the regular army in the most extensive land maneuvers ever held in the United States, is a great advancement toward the perfecting of the military system of the country.

In these maneuvers, held from October 15 to 27, the National Guard was, for the first time, placed on the same basis as the regular army. From private to brigadier-general the militiamen ranked with the regulars, drew the same pay, and performed the same duties. In 1902, maneuvers were held at Fort Riley, and militia took part, but the States sending troops bore the expenses, while this year, under the provisions of the "Dick bill," introduced in Congress by Representative Dick, of Ohio, the War Department met the expenses of both the regular troops and the militia. This bill provides—

That the Secretary of War is hereby authorized to provide for participation by any part of the organized militia of any State or Territory on the request of the governor thereof in the encampment, maneuvers,

and field instruction of any part of the regular army at or near any military post or camp, or lake or seacoast, defenses of the United States. In such case the organized militia so participating shall receive the same pay, subsistence, and transportation as is provided by law for the officers and men of the regular army, to be paid out of the appropriation for the pay, subsistence, and transportation of the army; provided, that the command of such military post or camp and of the officers and troops of the United States there stationed shall remain with the regular commander of the post, without regard to the rank of the commanding or other officers of the militia temporarily so encamped within its limits or in its vicinity.

The Fort Riley Military Reservation, chosen as the theater for the maneuvers, is centrally located, and is the largest of its kind in the country. Fort Riley was located in 1852 by Major E. A. Ogden, and the monument there to his memory marks the geographical center of the United States. The Smoky Hill and Republican rivers join on the reservation and form the Kansas River. There are smaller streams, ravines, hills, timber, and prairie.—rough and level stretches that present suitable conditions for varied problems. There are twenty thousand acres in the reservation, and enough adjacent farm land was leased for use during the maneuvers to provide upward of sixty square miles for the operations. Approximately, fifteen

thousand men took part in the maneuvers. This was but two thousand less than the number of soldiers engaged in the battle of Wilson's Creek in the Civil War.

The maneuvers furnished object lessons both for the regular troops and the militia. To the regulars they were particularly valuable, for the reason that all arms of the service were given an opportunity to act in conjunction and to observe the movements of each other. To the militia the maneuvers presented opportunities never before accorded the citizen soldiers. The theories taught from the tactics and drill regulations were put into use. The militiamen emerged from the humdrum of the school of the soldier, and the ceremonial and prescribed movements of a dress parade, to the formations, movements, and conditions of actual warfare, which stopped short only of bullets. The maneuvers did not degenerate into sham battles.

Col. Arthur L. Wagner, assistant adjutant-general of the United States army and chief umpire of the maneuvers held this year and last, in his official report on the maneuvers of 1902, said: "The exercises carried out more than surpassed my expectations. It is extremely difficult in the conduct of maneuvers to maintain the conditions of actual warfare and prevent the contact of opposing forces from assuming 'impossible' conditions and degenerating into a 'sham battle.' It is gratifying to note that the conditions of actual warfare were maintained to a striking degree. This I attribute mainly to the fact that most of the officers engaged in the maneuvers had participated in actual warfare. They appreciated the value of the exercises as training for real campaign duties, and their zeal, experience, and ability contributed to an immeasurable degree to the success of the maneuvers. The opinion generally—I think, universally—expressed by the officers participating in these exercises was that a great deal had been learned that could not otherwise have been acquired. In my opinion, everybody who participated in the encampment learned something, and many of us learned a great deal."

Last year, but two States, Colorado and Kansas, sent militia organizations to take part in the maneuvers. This year, Arkansas, Iowa, Kansas, Missouri, Nebraska, and Texas were represented. The Colorado troops were prevented from attending by strikes at home which demanded their attention. The encampment, as an annual event for the militia, is yet new. It is expected that the number of States to take advantage of the opportunities offered for the militia will increase year by year.

Major-Gen. John C. Bates, commanding the



MAJOR-GEN. JOHN C. BATES IN HIS HEADQUARTERS TENT AT FORT RILEY.

Department of Missouri, with headquarters at Omaha, was in command of the maneuver camp. The troops participating constituted the Provisional Division, the organization being as follows:

PROVISIONAL DIVISION.—Major-Gen. John C. Bates, U.S.A., commanding; First Battalion, United States Engineers; Hospital Corps Company of Instruction, No. 1; Company B, United States Signal Corps; Signal Company, Nebraska National Guard.

FIRST BRIGADE.—Brig.-Gen. Frederick D. Grant, U.S.A., commanding; Second United States Infantry; Twelfth United States Infantry (First Battalion); Twenty-first United States Infantry; Provisional Battalion, Texas National Guard.

SECOND BRIGADE.—Brig.-Gen. J. Franklin Bell, U.S.A., commanding; Sixth United States Infantry (eleven companies); Twenty-fifth United States Infantry (eleven companies); Fifty-fifth Regiment Infantry, Iowa National Guard.



PACK MULES CARRYING THE AMMUNITION FOR THE TWENTY-EIGHTH MOUNTAIN BATTERY.
(The small guns of the battery are taken apart and the pieces packed on mules for travel.)

THIRD BRIGADE.—Brig.-Gen. Thos. H. Barry, U.S.A., commanding; Provisional Regiment, Arkansas State Guard; Provisional Regiment, Missouri National Guard; Second Regiment Infantry, Nebraska National Guard.

FOURTH BRIGADE.—Brig.-Gen. James W. F. Hughes, Kansas National Guard, commanding; First Infantry, Kansas National Guard; Second Infantry, Kansas National Guard.

CAVALRY BRIGADE.—Brig.-Gen. Camillo C. C. Carr, U.S.A., commanding; Fourth United States Cavalry (eight troops); Eighth United States Cavalry (eight troops); Tenth United States Cavalry (eight troops).

DIVISIONAL ARTILLERY.—Major William H. Coffin, Artillery Corps, commanding; Sixth, Seventh, Nineteenth, Twentieth, Twenty-fifth, Twenty-eighth, and Twenty-ninth batteries, United States Field Artillery; Batteries A and B, Field Artillery, Kansas National Guard.

While but few States were represented in the camp by militia organizations, the majority of the States sent officers of the National Guard to witness the maneuvers. These officers were given every advantage to witness the exemplifications of the war problems and to take part in the discussions regarding them. Besides these militia officers from the various States, several foreign countries were represented by military attachés.

Many of the regular troops marched between their stations and the maneuver camp. The First Battalion of Engineers, Second Squadron Fourth Cavalry, the Twenty-eighth Mountain

Battery, the Sixth Infantry and band of Fort Leavenworth, marched to and from Fort Riley. The Second Battalion of the Twenty-fifth Infantry traveled between Fort Reno, Oklahoma, and Wichita, Kan., by rail, and marched between Wichita and Fort Riley. The First Squadron of the Eighth Cavalry returned from Fort Riley to Fort Sill, Oklahoma, by marching a distance of over three hundred and fifty miles. The First and Third battalions of the Twenty-fifth Infantry marched between Fort Niobrara and Norfolk, Neb., and made the remainder of the journey by rail. The band and First and Third squadrons of the Tenth Cavalry marched both ways between Fort Robinson and Sidney, Neb., making the rest of the journey by rail.

The problems for the maneuvers were prepared by a board of regular army officers. The two forces engaged were uniformed, and known as the "Blue" and the "Brown." All the troops were encamped together, and for each maneuver were divided and assigned to the Blue or the Brown, as was contemplated in the problem. The Blue forces wore the familiar blue uniform, the Brown forces wore the khaki or brown canvas blouse and trousers.

During the solution of the problems prepared for the officers and troops to solve, the umpires followed the various commands and decided when proper or improper moves were executed, the proper positions occupied, the troops distributed to the best advantage, and the necessary precautions taken. The umpires noted the actions of the commands on each side



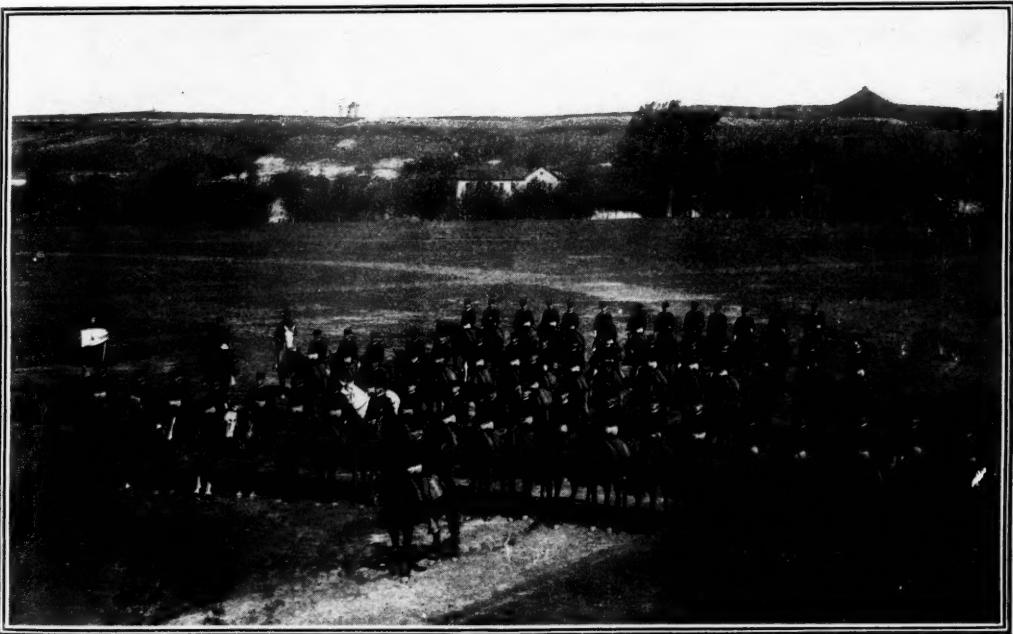
BATTERY IN ACTION.

(Caissons, with ammunition, in the rear.)

singly and collectively, and also observed the conduct of all engaged, from the highest officer to the privates. None of the opposing forces were allowed to come closer than one hundred yards of each other, as there is danger of accidents from even blank cartridges at a close range. If a charge were made, the movement stopped when the lines were within that distance of each other.

The maneuvers were strategical, and ceased when nothing short of actual conditions of bat-

tle could decide the victory. When a condition was brought about, by either the Blue or the Brown, that in actual warfare would be productive of results, then the umpires rendered a decision accordingly. Certain rules were followed; for instance: cavalry standing to receive a charge was considered defeated; patrols fired upon within one hundred and fifty yards by dismounted men or scouts were considered captured; in a cavalry *versus* cavalry charge of equal forces the victory went to the side bringing up a formed



TROOP "A," SIXTH CAVALRY.

reserve; when unprepared and attacked by cavalry on the flank, infantry or dismounted cavalry, although superior in strength, was declared defeated if the attackers were not discovered until within four hundred yards; cavalry could not move at a walk when exposed to the fire of artillery which was less than twenty-five hundred yards away; artillery could not go into action under infantry fire within eight hundred yards under ordinary conditions; at one thousand yards artillery could hold out against dismounted skirmish fire.

The assistant umpires reported to the chief umpire, and a final report on the outcome of the maneuver was prepared. Major-General Bates and Colonel Wagner met with the army and militia officers in a large tent, where the final report and the outcome of each maneuver was discussed, with the aid of a large map. In this same tent the militia officers attended lectures by officers of the regular army.

The signal corps of the army and the militia worked together with the Blues and the Browns, stringing field telegraph and telephone lines and maintaining signal stations. The engineering corps built the pontoon bridges across the Kansas and Republican rivers. The hospital corps maintained a field hospital and provided ambulance service. In the maneuvers the umpires



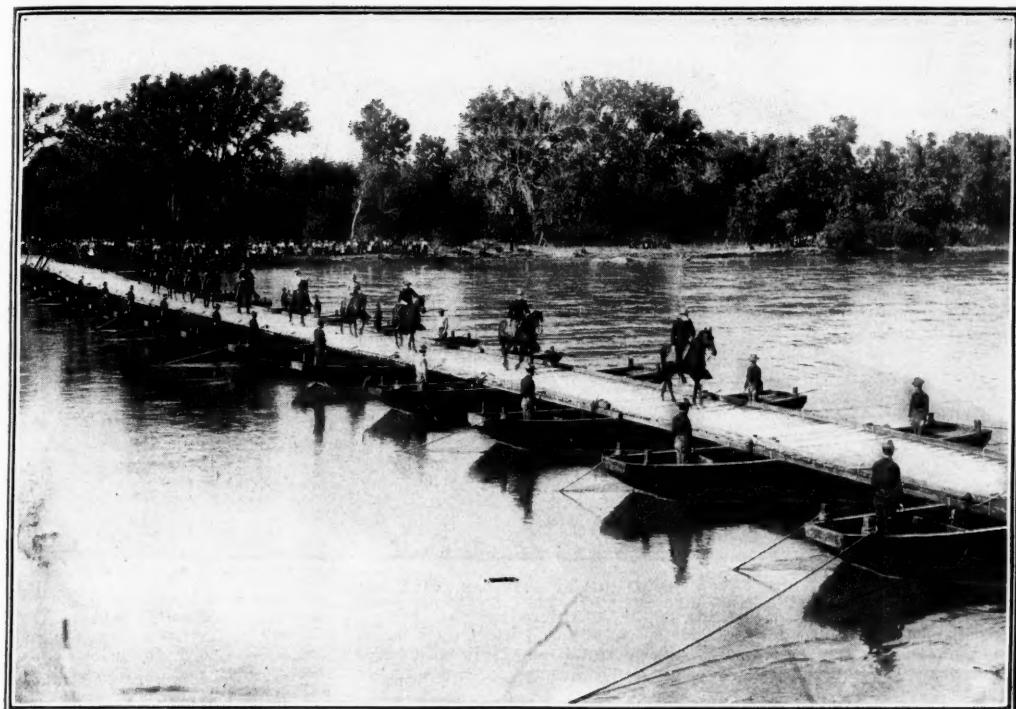
SIGNAL CORPS STRINGING TELEPHONE AND TELEGRAPH WIRES USED IN THE MANEUVERS.

declared a certain number of men killed or wounded on each side. It was the duty of the



SEVENTH BATTERY FIELD ARTILLERY READY FOR QUICK WORK.

(This is known as a "horse battery," and the caissons with the extra ammunition are left behind. The ammunition for use is carried in the limber chests.)



MAJOR-GEN. JOHN C. BATES AND STAFF CROSSING THE PONTOON BRIDGE BUILT BY THE ENGINEERS ACROSS THE KANSAS RIVER.

hospital corps to care for the wounded. The members of the corps received lectures from army surgeons during the encampment.

The Twenty-eighth Battery, which took part in the exercises, is the only mountain battery in the army. The small guns used are taken apart and packed on mules, making it possible for them to be transported in the roughest of mountain country.

The best of order was maintained in camp. Liquor dealers were prohibited from the reservation. The enlisted men displayed a decided interest in the event, and the enthusiasm and *esprit de corps* were marked. Several militia regiments have made clean records, the reports showing no men under arrest and none in the guardhouse during the encampment.

The officers and men engaged in athletic contests for the championships of the Department of Missouri. The officers from the various commands met in polo games. For the enlisted men,

running, jumping, obstacle races, wall-scaling for infantry, artillery drivers' contests, tent-pegging and tent-pitching contests, mounted bareback wrestling for the cavalrymen, and hurdle races for man and horse were held.

Every precaution was taken for the perfect sanitation of the maneuver camp, and the strictest orders were those pertaining to cleanliness. Experience has taught that far more soldiers die from disease and sickness in camp than are killed in battle. Especial attention was given to the selection of a suitable location for the camp, and by lectures and example the militia officers were instructed on this important point. Straw and crude petroleum were used daily in burning out sinks. Lime was used freely as disinfectant. The men were ordered to keep the tent walls up every day when the weather permitted, and the daily airing of clothing was required. Twice daily an inspection of the tents, kitchens, and surroundings was made.





EVOLUTION OF AMERICAN SMALL ARMS.

(1. New Springfield magazine rifle, caliber .30, with rod-bayonet. 2. Kräg-Jorgenson magazine rifle, caliber .30, with knife-bayonet; used during the war with Spain. 3. Springfield breech-loader, single shot, caliber .45, with rod-bayonet; issued to army in 1873; the rod-bayonet, however, was adopted in a later issue. 4. Old Springfield muzzle-loader, using percussion caps, with long angular bayonet, used during and before the Civil War. 5. Flintlock musket, used before and after the Revolution.)

THE NEW SPRINGFIELD RIFLE AND THE IMPROVEMENT IN SMALL ARMS.

BY CHARLES J. LEACH.

WHEN the new Springfield rifle is issued to our army, the United States will be equipped with the most serviceable and powerful military rifle in the world. It embodies the best features of the present Kräg-Jorgenson and the Mauser rifle, and has been given the most exhaustive tests under conditions likely to be met with in active service. These include placing the rifle in water so that some of its parts might rust, and also throwing sand in the mechanism.

The new weapon is what is known as the clip-loading magazine gun, being provided with a cut-off, which enables the firer to use it as a single loader, with the contents of the magazine (five cartridges) in reserve.

At present, only a few of these guns have been issued to expert shots in the army for firing tests; but about December, 1903, their manufacture for issue to the entire army will commence. Sixty thousand will be required, and they will

be turned out at the rate of about two hundred and fifty per day. In case of emergency, however, a larger number can be turned out, and private manufacturers could be called upon to make the rifles. The arming of the militia with the new rifle will be completed as soon as possible after the army is equipped with them.

The new Springfield weighs 9.47 pounds, against 10.64 for the Kräg, and its barrel is 24 inches, while that of the Kräg is 32. Over all, the new piece measures 43 inches, against 49 inches for the Kräg. Although the caliber of both rifles is the same,—namely, .30,—the shooting power of the Springfield is vastly superior.

While the bullets of both rifles are of the same weight, the smokeless-powder charge of the new rifle is increased to 43.3 grains, that of the Kräg being 37.6 grains. The increased charge gives the new Springfield a muzzle velocity of 2,300 feet per second, which is just 300

feet per second faster than the Kräg, and increases the muzzle energy from 1,952 foot-pounds to 2,582.

This increased energy causes the bullet to travel in a flatter trajectory, the rise above the ground at the highest point of the trajectory being much less. This increases what is known as the danger space, or the space covered by the bullet at a height above the ground not exceeding that of a man. Thus, in shooting at 1,000 yards, the bullet at its greatest height, which is at 500 yards, rises only 20.67 feet in the new Springfield, whereas the bullet in the Kräg rises 25.8 feet.

As an example of the tremendous decrease in the height of the trajectory of modern arms and the increase of the danger space by the flatter trajectory, it is interesting to note that in shooting at 300 yards with the smooth-bore muskets used before our Civil War the bullet rose at the turning-point of the trajectory 129 feet in the air. This turning-point was at 175 yards.

The new Springfield has a range of five miles, although it is, of course, impossible to see a human target at that distance. The piece will be sighted up to at least 3,000 yards; but even this distance is too great for actual aiming at a man or house, but will aid in dropping shots at random. At 1,000 yards, a line of men resembles a broad line, the uniform width of which is broken above by the line of heads and below by the line of legs. At 1,200 yards, cavalry is distinguished from infantry, and movements can be seen. At 2,000 yards, bodies of troops can be distinguished, and a man or horse appears like a dot. The whites of a man's eyes can be seen at 30 yards. At a distance of 53 feet, the new Springfield has penetrated 54.7 feet of pine boards, and 6.3 feet at 1,500 yards.

To provide for the rare occasions when the bayonet is needed, and at the same time provide a rod for cleaning, the new gun will be provided with a rod bayonet, which is raised from the wooden casing under the barrel, and held in its place when raised by a spring. It is similar to the rod bayonet adopted for the old Springfield caliber .45, some twelve years ago. This has dispensed with the clumsy bayonet scabbard, and will enable the soldier to carry on his person instead an efficient intrenching tool, not in any way connected with the rifle, and provide him with an efficient bayonet and cleaning rod, which can also be used for driving out any defective shell that may possibly stick in the gun.

An important feature in both the new Springfield and the present Kräg is the entire absence

of recoil when firing, and bruised shoulders and arms, caused by the heavy recoil of the .45 Springfield and older rifles, are now a thing of the past. The barrel of the new Springfield will be entirely incased in wood, instead of only part of it, as in the present rifles.

The old cartridge box, carrying some twenty rounds, has now been replaced by the web belt, carrying one hundred or more rounds, as the small caliber of the present bullet, which in diameter is about the same as an ordinary lead pencil, permits of a larger supply on the person of the soldier than in the case of .45 or .50 caliber bullets.

With accuracy, twenty rounds have been fired with the new Springfield by experts in 15 $\frac{1}{2}$ seconds, fifteen of these rounds being fired singly and five from the magazine. The average soldier, except when rapid fire was ordered, would probably not shoot more than ten shots a minute, if that many.

In 1878,—twenty-five years ago,—the .45 caliber Springfield of the United States had a rear sight graduated to 1,100 yards, and the sights of the rifles of some of the other European powers were graduated as follows: France, 1,968; England, 1,300; Spain, 1,093; Italy, 1,093; Germany, 1,750 yards. The velocity of the bullet at 82 feet from the muzzle of the rifle was then,—for the United States, 1,350 feet per second; France, 1,410; England, 1,263; Spain, 1,345; Italy, 1,345; Germany, 1,394.

To-day, the muzzle velocity per second of the rifles of the above powers is as follows: United States Springfield, 2,300; French Lebel, 2,073; English Lee-Metford, 2,000; Spanish Mauser, 2,388; Italian Mannlicher-Carcano, 2,100; German Mauser, 2,034 feet. Sights on these rifles are now graduated thus: United States, 2,000; France, 2,187; England, 2,800; Spain, 2,187; Italy, 2,100; Germany, 2,187 yards.

The high power of the modern rifle has led to several inventions for the protection of the soldier. These include the cuirass, or jacket, and the rifle shield. From tests made of these, not long since, by officers of the Ordnance Department, United States army, it was found that the cuirass, or jacket, furnishes protection against a revolver bullet at very close ranges, but at a range of twenty-five yards the jacket is easily pierced by a bullet from the caliber .38 revolver. It does not give protection against the jacketed bullet of the automatic pistol, caliber .38, at any moderate range.

The adoption of the cuirass, therefore, would require the soldier to carry a heavy weight which would give him no protection against rifle or carbine bullets at any fighting range, and would

not protect him against the revolver bullet even at moderate ranges greater than twenty-five yards.

The rifle shield, consisting of steel plate one-sixteenth of an inch thick, backed by a 1-inch thickness of bullet-proof fabric, will give protection against the caliber .30 rifle at ranges of five hundred yards, or greater.

The bullet-proof fabric one inch thick appears to possess resisting power about equal to or perhaps slightly greater than that of the steel plate one-sixteenth of an inch thick. Its weight, however, is greater than the steel plate, the steel plate $12\frac{1}{2}$ by 18 inches weighing 3 pounds 11 ounces, while the fabric one inch thick, same dimensions, weighs 5 pounds 8 ounces when dry and 10 pounds 8 ounces when saturated with water. From this it will be seen that of two shields of equal weight, one of steel and one of bullet-proof fabric, the steel shield will afford the greater protection. The fabric, moreover, would have the objection of being more liable to damage than steel; and when wet its weight would be almost doubled, while its bullet-resisting qualities would be greatly reduced. None of these devices are considered practicable for the soldier.

Tests as to penetration of the present rifle bullets in sand, loam, and steel have been made, showing that the penetration into sand and loam at 50 feet does not exceed 6 inches; at 500 yards, $13\frac{1}{2}$ inches; and at 1,000 yards, $16\frac{1}{2}$ inches. At the short range of 50 feet the velocity is so high that before displacement of the sand can result the bullets are completely destroyed,—the lead is fused and the steel casing torn into ribbons.

From the above it will be seen that the least penetration in sand occurs at the shortest ranges, and that at fifty feet distance six inches of sand is sufficient protection. At this distance the projectile is moving with so great a velocity that the particles of sand do not have time to admit of motion among themselves before the bullets are completely destroyed.

The penetrations at one thousand yards were greater than those at five hundred yards, the explanation being that having less velocity at that range their action is more of a pressure, like that of a cane being thrust into the sand, giving time for movement of the particles. At both 500 and 1,000 yard ranges the bullets were found uninjured.

Sweden has an American arm, the new Remington, sighted to the extreme range of 2,624 yards.

All the civilized powers of the world have adopted the magazine rifle of small caliber, and use smokeless-powder cartridges.

The following shows the penetrative power of the bullets of modern rifles: United States, new Springfield at 53 feet, 54.7 inches of pine; United States, Kräg-Jorgenson at 3 feet, 24.2 inches in dry oak; Canada, Lee-Enfield at 25 yards, 42 inches in fir; Great Britain and Egypt, Lee-Metford at 25 yards, 42 inches in pine; Belgium, Mauser at 109 yards, 32 inches in pine; France, Lebel at 218 yards, 24 inches in pine; Germany, Mauser at 109 yards, 32 inches in pine; Mexico, Mondragon at 25 yards, 42 inches in pine; Russia, Mouzin at 310 yards, 20 inches in fir; Spain, Mauser at 13 yards, 55 inches in pine; Sweden, new Remington at 109 yards, 4 inches in deal; Switzerland, Schmidt-Rubin at 218 yards, 23 inches in pine; Turkey, Mauser at 35 yards, 49 inches in pine.

Some of the great powers of Europe are even now looking for a still more deadly arm, and are experimenting with an automatic magazine rifle, or one in which the energy of the recoil is used to reload the rifle. All that it is necessary to do is to press the trigger, and the weapon continues to fire until all the cartridges in the magazine are used up. One of the serious difficulties to contend with in such rifles would be the supply of ammunition on the firing line.

The modern breech-loading and magazine rifle has been made possible by the American invention of the metallic cartridge; and the ideas which have resulted in the development of heavy ordnance, as well as small arms, also originated in America.

During the war between Russia and Turkey, in 1877, the long-range American rifle, in the hands of the Turks, first showed its deadly effectiveness. Anywhere from half a mile to a mile and a half the Russians found themselves subject to a fire beyond the range of their own guns.

The caliber of muskets used during the Revolution was 75-hundredths of an inch, and two hundred yards was a very extreme range for accurate shooting, as it was in the Mexican War. In 1812, muskets of .70 caliber were used, with no rear sight. This was a Springfield gun, and a smooth-bore flintlock; and some of them, it is said, were used in the Mexican War. The powder charges were, with the bullet, made up in the form of a cartridge, wrapped in linen or stout paper, with a thin paper on the end to bite off before the charge was inserted in the gun. This form of cartridge was used over a hundred years ago, and during our Civil War, but with the addition of the percussion cap.

The caliber of the Springfield, in the Civil War, was .58, but there were not enough of them to supply the vast army of the North, and arms

in great quantities were purchased in Europe from different countries, but the majority were the English Enfield.

The guns varied in caliber, and caused endless confusion, and were very injurious to the efficiency of troops. There were calibers of .54, .58 and .69, and even others, and frequently the ammunition would get mixed up. The Enfield was sighted up to 500 yards, but 300 or 400 yards was considered a long range. Berdan's sharpshooters, who used some rifles that weighed 35 pounds, and had to be fired from a rest, were thought to be doing wonders when they fired at 600 yards.

Effective fire with the old musket could not be delivered at a range over two hundred or two hundred and fifty yards.

A breech-loader was issued to our troops for trial in 1816, or half a century before the Prussian needle-gun made itself famous.

The development of our small-arm manufacturers during the Civil War resulted in a large demand from European countries for American arms, and within two or three years, commencing about 1868, \$100,000,000 was sent to this country in payment for military arms and ammunition. The Remington Arms Company alone received \$25,000,000.

The great range of the modern arm and the use of smokeless powder by skilled shots was best demonstrated in the Boer War, where the Boers, like our troops in the Revolution, trained from boyhood in the use of the rifle, caused such slaughter among the better drilled but poorer marksmen of Great Britain. The Boer War still further emphasized the necessity of using cover wherever possible against the present deadly small arm. The necessity of competent scouts and patrols and of the open-order formation was also demonstrated. Not the least important lesson was the need of mounted infantry to operate against such a mobile force as the Boers, and over such vast territory so difficult to traverse. The war in South Africa also developed the need of accurate sights, for the British sight proved defective, and no less than 250,000 of them had to be sent out to the troops in the field to replace the defective ones. The sights on our American Kräg, during the Spanish War, were also defective, those on the Spanish Mauser being most accurate. Had our troops met a better-trained army than that of Spain, under the circumstances, the superior Mauser would have told heavily against them. The defective sights have now been remedied.

Under the new tactics, when the supply of ammunition is ample, and the enemy is in large bodies, volleys may be fired at extreme ranges. The fire at will and the fire with counted cartridges are used from four hundred to eight hundred yards. The rapid fire is used at short ranges, at the decisive moment of action.

The squad is the basis of the extended-order tactics, and men are taught to regard the squad as the unit from which they should never be separated. If their squad should be broken up, or the men become separated, they place themselves under the orders of the nearest squad leader, as if it were the one to which they originally belonged.

Men firing at the enemy, who may be beyond the control of the squad leader, do not fire at a distance of over 400 yards at a man lying down, 500 yards at a man kneeling, 600 yards at a man standing, 700 yards at a horseman, and at not over 800 yards at a small squad of men or line of skirmishers.

Under the new tactics, the command "Load" can be given from any position, and when the firing of volleys is needed the commands are simply, "Load," "Ready," "Aim," "Fire."

With the muzzle-loading guns, even in the Civil War, it required ten commands to load, as follows: (1) "Load," (2) "Handle cartridge," (3) "Tear cartridge," (4) "Charge cartridge," (5) "Draw ramrod," (6) "Ram," (7) "Return ramrod," (8) "Cast about," (9) "Prime," (10) "Shoulder arms," (11) "Ready," (12) "Aim," and (13) "Fire."

Effectiveness in battle depends upon the skill of the marksman as much as upon the perfection of his weapon. It was estimated that at the battle of Churubusco, during the Mexican War, the Americans expended one hundred and twenty-five shots for each of the enemy disabled, and the Mexicans eight hundred.

The South African, Spanish-American, and Chinese wars show that the wounds inflicted by the high-powered small-caliber bullets are of a merciful nature, producing but little shock, and unless in a vital part, the wounds yield readily to treatment and recovery.

This merciful quality of the bullet is found objectionable in warfare against savages, and the British in North Africa are finding that the small caliber bullet does not stop the rush of the fanatical followers of the Mad Mullah. The .45 and .50 caliber bullets made frightful wounds, and had a far better stopping effect, than those now in use.



A SECTION OF COMPLETED SEA WALL AND RIP-RAP FACING.

GALVESTON'S GREAT SEA WALL.

ALITTLE over three years ago,—in September, 1900,—the city of Galveston, Texas, experienced one of the greatest disasters in American history. The storm which swept over the island destroyed such a large section of the city that it was considered doubtful if Galveston could recover from the blow which it had received, for the heart of the business section of the city and a number of the most pretentious residence districts were literally ruined, the loss aggregating many millions of dollars in money, to say nothing of the number of persons who were killed.

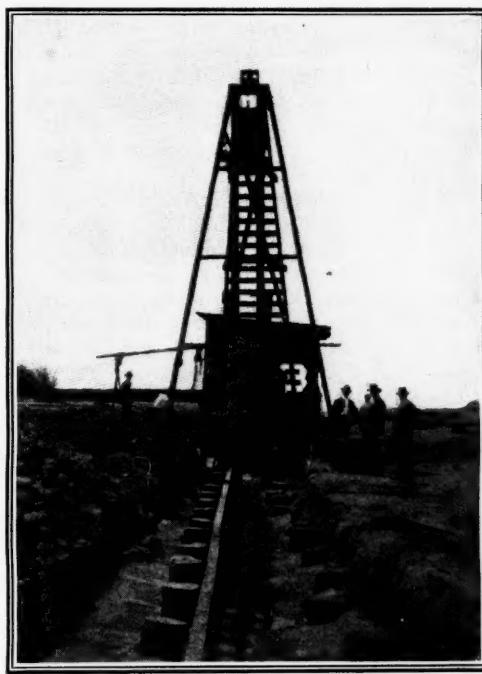
When the question of rebuilding the city came up, the plan was suggested of changing the site to another locality and abandoning the present city altogether. As is well known, it was built upon an island which is merely a sand-spit not exceeding three miles in width at any point, and extending parallel to the mainland a distance of about thirty-one miles. The fact that the city almost directly faces the Gulf, and that the highest part of the land on which its build-

ings stand is but a few feet above high tide, caused many to fear that a repetition of the storm of 1900 might totally destroy it.

The majority of the citizens of Galveston, however, opposed the removal of the city, since it would be necessary to abandon the harbor which had been created, and the railroad terminals, which would entail a great loss, aside from the value of the other property which would have to be relinquished. A strong feeling of civic pride was also developed which opposed the idea, and as the result of public sentiment, it was determined to wall the city against further inroads of the sea. Government engineers and other experts, who were called to investigate the feasibility of this project, gave the opinion that such a plan was practicable. Then the question of how to pay for it arose. It was decided to issue bonds to the extent of \$1,500,000, a large portion of which was taken by residents of the city. As an indication of the feeling among the people, it may be added that the securities were purchased not only by

the wealthier class, but by clerks, laborers, and many who could not afford to buy more than one or two of the bonds.

With the money thus realized the contracts were let to carry out plans submitted by a board of engineers, which consists of Gen. H. M. Roberts, of the United States army; Alfred Noble, of Chicago; and H. C. Ripley, of Ann Arbor, Mich. As a result a remarkable breastwork is being completed by which, it is believed, that the city will be able to defy any further attacks of the sea. The structure is available not only as a protection, but in other ways. It is over three miles in length, or nearly 18,000 feet, skirting the shore of the island in front of the most exposed portion of the city. Its top is three feet above the highest point reached by the water in the storm of 1900. Here the wall is five feet in width, gradually extending to sixteen feet on the bottom. It is concaved on the side exposed to the Gulf, in order to minimize the force of the waves; but an additional barrier is provided in what is called "rip-rap" work, composed of blocks of granite laid along the water face of the wall. This formation is twenty-seven feet in width, and the stone is piled to a height ranging from three to five feet above the surface of the water. When it is stated that some of the single blocks weigh a ton apiece, an idea of the massiveness of this protection can be gained, while special care has been taken to prevent the wall from being undermined, since the island is composed so largely of sand. Before it was laid a foundation was made by driving wooden piles through the sand

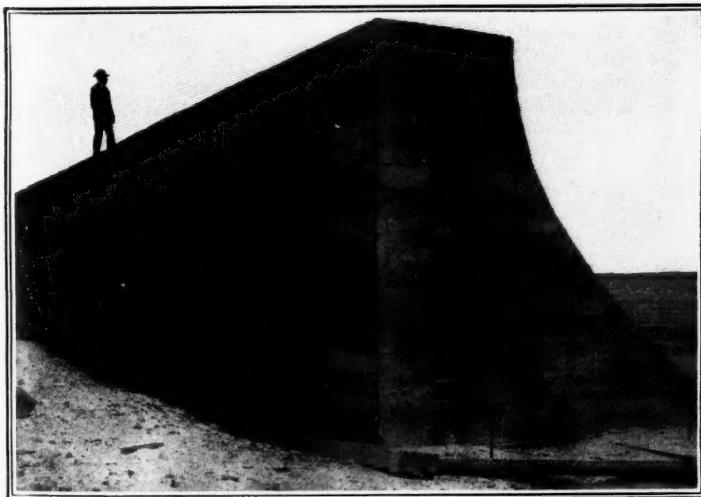


DRIVING PILES FOR FOUNDATION OF WALL.

into the clay formation which exists below it. To the piling was fastened a face of heavy planks, also driven down to the clay. A trench three feet deep was excavated back of the planking, which was filled with concrete, and

upon this blocks of the same material laid to form the wall proper, the material being manufactured by special machinery on the spot and molded into the proper size and shape.

To further strengthen the wall, the shore back of it is being filled in with earth and stone to a depth of two hundred feet. Those in charge of the improvement have taken advantage of this to form an ornamental feature which will be one of the greatest attractions of the city. The top of the wall proper will be used as a walk, back of which a driveway thirty feet in width will be arranged, paved with stone and concrete. On the



SIDE VIEW, SHOWING CONTOUR OF WALL.

inner side of the driveway is another walk, the balance of the space being sodded. This portion will be planted with trees and shrubs, as well to keep it impeded as to make a decorative feature, so that, instead of an unsightly structure along the beach front, the wall will form an attractive esplanade with the features of a boulevard and promenade.

The people of Galveston are so determined to protect themselves from further storms, however, that they have decided upon another improvement which is almost as important as the sea wall. Beyond the points where it terminates is a considerable area of low ground, which it has been determined to elevate to a height equal to that reached by the storm of 1900. The work is to be done by covering the area with material pumped from the water in the vicinity and distributed by pipes. This will be performed by the employment of powerful dredges, which take the sand and mud from the bottom by suction and force it ashore through conduits. It is esti-

mated that the cost of the improvement will be fully \$2,000,000, but bonds are to be issued immediately to pay for it, and the indications are that most, if not all, will be taken by the citizens.

When the small population of Galveston is considered, and the extent to which it was crippled financially by the disaster referred to, the determination and courage of the community form a notable illustration of the spirit which dominates the Southwest. In rebuilding the portions of the city which were devastated the people have been compelled to pay a sum closely approaching the total loss by damage, the smallest estimate of which was \$50,000,000. Yet they have almost unanimously favored the extra expense to protect themselves, although its cost to each inhabitant represents nearly \$100, but with the decision to construct this bulwark has come a feeling of hopefulness for the future which pervades all classes, and the moral effect of the improvement will really be one of its most beneficial results.



VIEW OF WALL, FROM SEA FRONT, SHOWING VARIOUS STAGES OF COMPLETION.

A DEFENSE OF RUSSIA'S POLICY IN FINLAND.

BY HIS EXCELLENCY M. DE PLEHVE.

(Russian Minister of the Interior.)

[It is not often that a great minister of state will deign to meet criticism of his policy or methods by writing in explanation and defense for the pages of a foreign periodical. It is certainly out of the ordinary course of things that such a man as M. de Plehve, the Russian Minister of the Interior, should write for publication in England and America a vindication of Russian policy in Finland. The present article was evoked by an "open letter" addressed to the Russian minister by Mr. W. T. Stead, and published in the English *Review of Reviews* for August. Its point of view is not essentially different from that taken by the eminent Russian jurist, Professor de Martens, when last in New York, in conversation with the editor of this magazine. Mr. Stead absolutely dissents from M. de Plehve's views as here expressed. Curiously enough, the chief difference of opinion between them is based upon a matter that neither of them discusses. Mr. Stead takes it for granted that the relation between Finland and Russia is defined by the terms of an express compact which Russia may not alter or violate without Finland's consent. M. de Plehve assumes that the Duchy of Finland is a part of the Russian Empire in the full sense, and therefore amenable to such general principles relating to military, fiscal, and other matters as are deemed necessary for what to the Russian mind is always the paramount consideration,—namely, imperial unity. Professor de Martens always distinctly asserts that Russia is not in the least bound by any such compact with Finland as Englishmen and Americans have commonly supposed to exist. M. de Plehve ignores altogether the idea of such a compact, and takes it for granted that the Czar's government has the right throughout the Czar's dominions to take such measures from time to time as the larger objects of Russian public policy require.

—THE EDITOR.]

DEAR SIR,—The esteem with which I have always regarded the tendency of your journalistic labors in the British press has led me to read the "open letter" you addressed to me in the August number of the *Review of Reviews* with that consideration which is due to the frankly expressed opinion of a foreign writer inspired with friendly feelings toward Russia.

In your "open letter" you enumerate the accusations which are brought against the Russian Government with regard to its policy in Finland (the manifesto of February 3–15, 1899, the new military law and the special powers conferred on the governor-general for preserving order). You then ask whether the benefit derived by the Russian Government from the extraordinary measures which it has applied to Finland during the last four years counterbalances the harm which, in your opinion, these same measures have done it in the public opinion of western Europe and America, as well as in the feelings and attitude of the local population, which has replied to them by emigration *en masse*.

Before answering your question, permit me to point out that in criticising Russian policy in Finland a distinction should be made between its fundamental principles,—*i.e.*, the ends which it is meant to attain, and its outward expression, which depends upon circumstances.

The former,—*i.e.*, the aims and principles,—remain *unalterable*; the latter,—*i.e.*, the way in which this policy finds expression,—is of an incidental and temporary character, and does not always

depend on the Russian authority alone. This is what should be taken into consideration by Russia's Western friends when estimating the value of the information which reaches them from Finland.

LOCAL SELF-GOVERNMENT AS A RUSSIAN PRINCIPLE.

As to the programme of the Russian Government in the Finland question, it is substantially as follows:

The fundamental problem of every supreme authority,—the happiness and prosperity of the governed,—can be solved only by the mutual coöperation of the government and the people. The requirements presented to the partners in this common task are, on the one hand, that the people should recognize the unity of state principle and policy and the binding character of its aims; and, on the other, that the government should acknowledge the benefit accruing to the state from the public activity, along the lines of individual development, of its component elements.

Such are the grounds on which the government and the people should unite in the performance of their common task. The combination of imperial unity with local autonomy, of autocracy with self-government, forms the principle which must be taken into consideration in judging the action of the Russian Government in the Grand Duchy of Finland. The manifesto of February 3–15, 1899, is not a negation of such a peaceful coöperation, but a confirmation of the aforesaid leading principle of our government in its

full development. It decides that the issue of imperial laws, common both to Russia and Finland, must not depend altogether on the consent of the members of the Finland Diet, but is the prerogative of the Imperial Council of State, with the participation on such occasions of members of the Finland Senate. There is nothing in this manifesto to shake the belief of Russia's friends in the compatibility of the principles of autocracy with a large measure of local self-government and civic liberty. The development of the spiritual and material powers of the population by its gradual introduction to participation in the conscious public life of the state, as a healthy, conservative principle of government, has always entered into the plans of the sovereign leaders of the life of Russia as a state. These intentions were but lately announced afresh from the throne by the manifesto of February 26 of the current year. In our country this process takes place in accordance with the historical basis of the empire, with the national peculiarities of its population.

The result is that in Russia we have the organization of local institutions which give self-government in the narrow sense of the word,—*i.e.*, the right of the people to see to the satisfaction of their local economic needs. In Finland the idea of local autonomy was developed far earlier and in a far wider manner. Its present scope, which has grown and developed under Russian rule, embraces all sides, not only of the economic, but of the civil, life of the land. Russian autocracy has thus given irrefragable proof of its constructive powers in the sphere of civic development. The historian of the future will have to note its ethical importance in a far wider sphere as well: the greatest of social problems have found a peaceable solution in Russia, thanks to the conditions of its political organization.

ITS APPLICATION TO FINLAND.

For a full comprehension, however, of the manifesto of 1899, it must be regarded as one of the phases in the development of Finland's relations to Russia. It will then become evident that as a legacy of the past it is the outcome of the natural course of events which sooner or later must have led up to it. The initiation of Finland into the historical destinies of the Russian Empire was bound to lead to the rise of questions calling for a general solution common both to the empire and to Finland. Naturally, in view of the subordinate status of the latter, such questions could be solved only in the order appointed for imperial legislation. At the same time, neither the fundamental laws of the Swedish period of rule in Finland, which were com-

pletely incompatible with its new status, nor the Statutes of the Diet, introduced by Alexander II., and determining the order of issue of local laws, touched, or could touch, the question of the issue of general imperial laws. This question arose in the course of the legislative work on the systematization of the fundamental laws of Finland. This task, undertaken by order of the Emperor Alexander II. for the more precise determination of the status of Finland as an indivisible part of our state, was continued during the reign of his august successor, the Emperor Alexander III., and led to the question of determining the order of issue of general imperial laws. The rules drafted for this purpose in 1893 formed the contents of the manifesto of 1899. Thus we see that during six years they remained without application, there being no practical necessity for their publication. When, however, this necessity arose, owing to the lapse of the former military law, the manifesto was issued. It was, therefore, the finishing touch to the labor of many years at the determination of the manner in which the principle of a united empire was to find expression within the limits of Finland, and remained substantially true to the traditions which for a century had reigned in the relations between Russia and Finland. It presented a combination of the principle of autocracy with that of local self-government without any serious limitations of the rights of the latter. Moreover, while preserving the historical principle of Russian empire-building, this law determined the form of the expression of the autocratic power within the limits of the Grand Duchy in a manner so much in accord with the conditions of life in Finland that it did not touch the organization of a single one of the national local institutions of the duchy.

This law, in its application to the new conscription regulations, has alleviated the condition of the population of Finland. Contrary to the information you have received, the military burden laid on the population of the land has not been increased by 5,000 recruits annually, but has been decreased from 2,000 men to 500 per annum, and latterly to 280. As you will see, there is in reality no opposition between the will of the Emperor of Russia as announced to Finland in 1899 and his generous initiative at The Hague Conference. But, you ask me, has not this confirmation of the ancient principles of Russian state policy in Finland been bought at too dear a price? I shall try to answer you. The hostility of public opinion toward us in the West in connection with Finnish matters is much to be regretted, but hopes may be entertained that under the influence of better infor-

mation on Finnish affairs this hostility may lose its present bitterness. We are accustomed, moreover, to see that the West, while welcoming the progressive development of Russia along the old lines it, Europe, has followed itself, is not always as amicably disposed toward the growth of the political and social self-consciousness of Russia and toward the independent historical process taking place in her in the shape of the concentration of her forces for the fulfillment of her peaceful vocation in the history of the human race.

ATTITUDE OF THE FINNISH PEOPLE TOWARD RUSSIA.

As to the present attitude of the population of Finland toward us, to you, as to a friend of Russia, I am ready to make the most reassuring statements. The attitude of the population of Finland toward Russia is not at all so inimical as would appear on reading the articles in the foreign press proceeding from the pen of hostile journalists. To the honor of the best elements of the Finnish population, it must be said that the degree of prosperity attained by Finland during the past century under the *egis* of the Russian throne is perfectly evident to them; they know that it is the Russian Government which has resuscitated the Finnish race, systematically crushed down as it had been in the days of Swedish power. The more prudent among the Finns realize that now, as before, the characteristic local organization of Finland remains unaltered, that the laws which guarantee the provincial autonomy of Finland are still preserved, and that now, as before, the institutions are active which satisfy its social and economic needs on independent lines.

CAUSES OF EMIGRATION.

They understand, likewise, the real causes of the increasing emigration from Finland. If, along with them, political agitation has also played a certain part, alarming the credulous peasantry with the specter of military service on the distant borders of Russia, yet their emigration was and remains an economic phenomenon. Having originated long before the issue of the manifesto of 1899, it kept increasing under the influence of bad harvests, industrial crises, and the demand for labor in foreign lands. Such is also the case in Norway, where the percentage of emigration is even greater than in Finland.

According to a Stockholm correspondent of the German *Neue Preussische Kreuz-Zeitung*, reprinted in many other papers, the increase of emigration from the Scandinavian states has be-

come a genuine calamity, last summer Norway alone giving two thousand emigrants per week. This growth of emigration the Stockholm correspondent explains by the very causes to which I have referred, as well as by the agitation carried on by the agents of the social-democratic party, who breed dissatisfaction with their condition among the workmen and the lower classes of the population in general. Moreover, in the question of emigration from Finland we must not forget that many of the emigrants, having earned money abroad return to their native land again.

ANTI-RUSSIAN AGITATIONS.

Having elucidated the substantially unalterable aims of Russian policy in Finland, let us proceed to the causes which have led to its present incidental and temporary form of expression. This, undoubtedly, is distinguished by its severity, but such are the requirements of an utilitarian policy. By the by, the total of these severe measures amounts to twenty-six Finns expelled from the country and a few officials dismissed the service without the right to a pension. It was scarcely possible, however, to retain officials in the service of the state once they refused to obey their superiors. Nor was it possible to bear with the existence of a conspiracy which attempted to draw the peaceful and law-abiding population into a conflict with the government, and that, too, at a moment when the prudent members of the population of the duchy took the side of lawful authority, thereby calling forth against themselves persecution on the part of the secret leaders of the agitation party. The upholders of the necessity for a pacific policy toward Russia were subjected to moral and sometimes physical outrage, and their opponents were not ashamed to institute scandalous legal processes against them for the purpose of damaging their reputations.

Very different is the attitude of the great mass of the population, as the following incident shows: The president of the Abo Hofgericht, declining to follow the instructions of the party hostile to Russia was, on his arrival in Helsinki, subjected to a variety of insults from the mob gathered at the railway station. On his return to Abo he was, on the contrary, presented with an address from the peasantry and local landowners, in which the following words occur,—"We understand very well that you have been led to your patriotic resolve to continue your labors in obedience to the government by deep conviction, and do not require gratitude either from us or from any others; but at the important crisis our people is now experiencing

it may be of some relief to you to learn that the preponderating majority of the people, and especially in broader classes, gratefully approve of the course you have taken."

It will scarcely be known to any one in the West that when signatures were being gathered for the great mass-address of protest dispatched to St. Petersburg in 1899, those who refused their signatures numbered martyrs among them. There are some who for their courage in refusing their signatures suffered ruin and disgrace and were imprisoned on trumped-up charges (v. the case of K., schoolmaster, of Seinajoki). Moreover, the agitators aimed at infecting the lower classes of the population with their intolerance and their hatred of Russians, but, it must be said, with scant success. The whole of the Western press reproduced the story of the Russian *korobeniki* or peddlers, whom it was attempted to compare to wild beasts, for the capture of which rewards are given in Finland. During the year 1899 about two thousand of these peddlers were expelled from Finland, and were thus deprived of their accustomed earnings.

With our reference to the persecution of Russian peddlers we touch on a fresh series of accusations which may be brought against the leaders of the Finland opposition party. These charges amount to this, that the agitators of Finland have turned all their efforts to instilling into the minds of the local population and of the people of western Europe the idea of an impassable gulf lying between Russia, on the one hand, and western Europe, including Finland, on the other, and thus strive to stir up the West against Russia. In your article you speak of the former happy, cordial union between Russia and Finland which reconciled us with the West. In reality all the while a ceaseless agitation was going on in the Grand Duchy for the separation of Finland from Russia in all spheres and forms of life, economic as well as spiritual. Those Finlanders who were working for this separation, expressing themselves more freely in the foreign press, represented Finland as a bulwark of the West against Russia, regarded the Grand Duchy as a militant outpost of Western civilization and of Protestantism against the orthodox Slavonic East. Our ancient, perpetual Eastern foe—so, literally, were we styled in papers published in Stockholm by hostile Finlanders.

IMPERIAL UNITY AS AN END.

After these explanations I shall give the following answer to your entreaty to put an end to the present policy of Russia in Finland, which you are pleased to call the policy of General Bobrikoff. First of all, it is incorrect to connect the present course of Russian policy in Finland with the name of the present Governor-General of Finland alone, for, as regards the fundamental purpose of his labors, all the advisers and servants of his Imperial Majesty who have to do with the government of Finland are at one with him in their firm conviction that the measures now applied in Finland are called for by the pressing requirements of our state. With regard to the essence of the question, I repeat that in matters of government temporary phenomena should be distinguished from permanent ones. The incidental expression of Russian policy, necessitated by an open mutiny against the government in Finland, will, undoubtedly, be replaced by the former favor of the sovereign toward his Finnish subjects, as soon as peace is finally restored and the current of social life in that country assumes its normal course. Then, certainly, all repressive measures will be repealed. But the realization of the fundamental aim which the Russian Government has set itself in Finland,—*i.e.*, the confirming in that land of the principle of imperial unity,—must continue, and it would be best of all if this end were attained with the trustful coöperation of local workers under the guidance of the sovereign to whom Divine Providence has committed the destinies of Russia and Finland.

We are entitled to hope for the possibility of such coöperation, as already all the branches of the imperial authority are acting freely with the active coöperation of natives of Finland. The prudent members of the population, who are in an immense majority, have calmed down, and show confidence in the Government; at the last summons for the conscription about 80 per cent. of those who were of conscription age put in an appearance, which is but little below the ordinary percentage of those who in former years appeared for conscription in Finland. Finally, in pamphlets circulating in Finland authoritative voices already state: "The Finnish people must recognize that the interests and demands of its Eastern neighbor are just."

Believe me, sir, yours truly, V. PLEHVE.
ST. PETERSBURG, August 19, 1903 (September 1).

REBIRTH OF THE JAPANESE LANGUAGE AND LITERATURE.

BY STANHOPE SAMS.

RECENT press dispatches from Tokyo contained a brief announcement that the government had decided to promote the adoption of the "Roman letter," as used in the books and newspapers of this country and of western Europe, and known in Japan as the *Roma-jī*, for writing and printing the Japanese language. While the newspapers of Europe and America were filling pages with partly fanciful narratives of Turkish atrocities, or with harrowing stories of the latest murder, a few words were deemed an adequate record of an event that crowned with success one of the most important reform movements in the history of civilization.

Briefly and primarily, this reform means a complete change in the handwriting and in the type of the newspapers, magazines, and books of more than forty million people. Briefly and secondarily, it means the sweeping away of the most hideous, cumbrous, and difficult system of writing ever devised, and the substitution for it of the simplest and clearest system of writing that civilization and art have evolved, and the consequent simplification of the Japanese language. Briefly, again, it means the opening of the outside world for Japan, and the letting out upon us, through gates long shut and barred, the refining influences of its own beautiful literature and art.

Changes in a language come very slowly, and usually they are unperceived by the generations that used it as a living speech during the period of its transformation. It was thus that Greek and Latin grew from tribal dialects into the polished classic tongues we know, and so French and English slowly emerged from jargons of Gaul and Britain. But a rare opportunity is presented to the Japanese and to us in this generation of witnessing, if we choose, what will probably be the most sweeping transformation that has ever taken place in the language of a great nation. To appreciate this tremendous revolution, we must have some notion of the present method of writing Japanese.

The Orientals are wonderful chirographers, and the systems of writing they have invented have been extremely intricate, though many of them have been of great beauty. No penman of the West can at all approach the exquisite craft of the scribes of Bagdád or Tahrán, who

write the Arabic character so gracefully as to make each scroll a finished picture, or of those of Peking, who paint the Chinese ideographs on silk so finely that each writing is worthy an exhibition in the Louvre. But even in the Orient there is no longer sufficient leisure for the practise of this art, and Japan has suddenly awakened to the fact that her very language, the only means by which she may hope to receive the message of the outside world or deliver her own, has isolated her and shut her in by impassable barriers.

Centuries ago, Japan borrowed the picture-writing of the Chinese. It was ill-suited for the purpose, because Japanese is inflected, and when the inflexible Chinese signs are used they must be read with verbal and other terminations, which are now usually written in *Kana*, or the native writing, in the text. Later, the Japanese invented a syllabary of fifty sounds, and wrote it by means of fragments of certain Chinese signs, these fragments being called *Katakana*, or *Hiragana*, according as they were square or "block" signs, or cursive. The *Hiragana* became the more popular, and has developed into seven or more styles, all of tremendous difficulty as to both writing and reading. So complex has become the Japanese writing that a single page of a magazine may show three different styles or systems, and many variants. First come the Chinese characters, representing the body of the writing; but as these are no longer intelligible to the average reader, they are rewritten at the side in *Katakana* or *Hiragana*. Then all grammatical inflections,—endings of verbs, plurals of nouns, prepositions, conjunctions, etc.,—are in *Hiragana*. Foreign words, especially names, are generally written in *Katakana*.

The acquisition of these intricate systems of writing constitutes the most difficult of all linguistic tasks. It is safe to say a foreigner never quite masters it; and the Japanese children have to spend three or four years in acquiring enough of it,—say, 3,000 or 4,000 signs,—to enable them to go on with even elementary studies. This stupid task has cramped and shrunk the intellectual life of Japan. When it is ultimately abandoned, the national mind, released from captivity, will spring forward with elation.

An illustration showing exactly how Japan-

ese is printed, and how the same words look when transliterated into the Roman letter, will make this description clearer. The following is part of a long sentence taken at random from a page of the most widely circulated magazine of Japan, the *Tai-yo*, or *Sun*:

は
これ
は
天
明
八
年
の
此
等
の
出
版
物
あ
り
て
以
來
の
大
大
通
萬
石
道
大
大
行
と
流
行
に
て
出
せ
し

(The same in Roman letters)

Tenmei hachi nen no Shogatsu,
Kisanji "Bunbu Nido Bankoku Doshi"
to iyu wo idaseshi ni; korewa korera
no shippan-butsu arite irai no
ō-atari ō-ryuko nite.

(Translation)

Kisanji published the Encyclopedia of
Military and Literary Arts in January
of the eighth year of Tenmei. Ever
since works of this kind have appeared,
it has held the highest rank and popu-
larity.

The beginning is at the right and top, and the printing is read down; then back again to the second column to the left, which is read down, and so on. There are only two lines of reading, although there are four lines of printed characters. The large signs are Chinese ideographs, some of them followed in the same column by *Hiragana* signs. The Chinese ideographs convey to the eye the meaning of the writer. The small characters to the right of each line of Chinese signs are the Japanese *Hiragana*, and are used to indicate to the unlearned the Japanese words that are represented by the Chinese ideographs. For instance, the first two Chinese signs mean, if used separately, *ten*, "heavenly," and *mei*, "brightness," or the conjunction of sun and moon. Taken together they make the word *Tenmei*, the name of one of the historical eras of Japan, about a century and a half ago. To the right of *tenmei* in Chinese are four Japanese *Hiragana* signs, *te-n* and *me-i*. And so on down column after column of magazines and newspapers.

The *Romaji* reform movement is not of recent origin. The more liberal Japanese scholars, indeed, have never been satisfied with their writing, and as soon as the simplicity of the Roman character became known in Japan a movement was started to adopt it. A society was organized to promote the reform and called itself the *Romajikai*, or Roman Letter Society. But the first of these reformers met with defeat, chiefly because the scholars had found that the knowledge of the old and difficult writing gave to mere learning an autocratic and exalted state. Within the last few years, however, there has been renewed activity on the part of the friends of the *Romaji* movement. Many of the Japanese in New York city have been especially enthusiastic and persistent. The result of these latest efforts is found in the official sanction of the reform.

The pertinacity of the Japanese in clinging to the Chinese ideographs has astonished all who have observed the facility with which these plastic people have adapted themselves to new conditions. It was not

due to an aversion to change, for they had changed their entire civilization. It was largely due to the fact that there was, and still is, among the Japanese a deep veneration for the old Chinese characters. They have a peculiar charm and individuality of their own. Besides, they come nearer to being a universal language than any other language has been or will be. Compared with their wide demesne, Russian seems a neighborhood dialect and English but a provincial tongue. This broad universality is due to the fact that a Chinese sign stands for an idea and not a word. A certain sign of two simple strokes means "man," and may be read instantly by some 600,000,000 people into fifty or one hundred languages or dialects. Such an ancient masterpiece of human art and ingenuity could not be lightly abandoned in favor of a new system of writing that was neither beautiful nor venerable.

The *Kana* scripts, however, can present no such high claims to consideration. But they are national, and have long been in possession of

the field. Again, they were a vast improvement upon the Chinese signs in respect to ease of writing and learning. However, the advocates of *Romaji* have generally concentrated their attack on the Chinese signs, knowing that if they could be routed the entire system of Japanese writing would fall with them.

A short example of the *Katakana*, which is principally used now in writing foreign words and names that occur in Chinese or *Hiragana*, will show the third kind of script or character used by the Japanese. The following is the most famous short poem in Japanese literature :

モ	ウ	ア	Asagao ni
ラ	ル	サ	Tsurube torarete -
イ	ベ	ガ	Morai - midzu!
ニ	ト	オ	
ズ	ラ	二	
	レ		
	テ		
(Translation)			
By the morning-glory			
My well-bucket has been seized --			
Give me water!			

THE ASAGAO (MORNING-FACE) MORNING-GLORY.

(Like the Chinese and *Hiragana*, the *Katakana* is read down the columns, and the columns are read from right to left. This script, however, is sometimes written horizontally, and from left to right, or from right to left!)

The chief disadvantages to the Japanese of the use of the Chinese ideographs are the difficulty of learning enough of them for extensive reading and study, the time thus lost to other studies, and their unsuitableness for writing the Japanese language. But there is another disadvantage that would alone be fatal to any system of writing. This is the lack of definiteness in the meanings of the signs. A sentence written in ideographs may be read in several different ways, while if written in *Romaji* it could not possibly be read in but one way. To illustrate : the sign for the city of the imperial residence, which is used in the final syllable of Peking, Nan-king, and Tokyo, may be read as the common Japanese word *miyako*, or *kyo*, or *kei*, or *kin*, or *king*. As to how it must be read, depends upon the context and a knowledge of four or five different systems of reading the signs. A civilized and progressive people cannot long consent to be fettered by such an oppressive superstition.

The chief advantages of the *Romaji* are so apparent that they were easily presented and understood, and this enabled it to overthrow the inherited prejudices of the Japanese against a foreign system. They are : ease of learning, of writing, and of reading ; the great rapidity with which it may be written with pen or typewriter, or "set up" in a printing shop ; and the definiteness and fixity of form and meaning. But what has appealed most strongly to the aspiring Japanese was the argument that the Chinese and *Kana* systems kept them, as a nation, sealed within the old walls of feudalism, while the *Romaji*, an enlightened system of writing, would open Japan to the world, and the world to Japan. The most deeply-rooted objection to the *Romaji* reform was not, as is generally supposed, to the change in the manner of writing and printing the language. The manifest advantages of the new system soon triumphed over this. Moreover, it is a very common occurrence in history for one people to borrow the alphabet or the hieroglyphics of another. Hellas borrowed from Phœnicia, and Phœnicia had borrowed from some other people, probably the Egyptians. The Russians got their alphabet from the Greeks, all western Europe has borrowed the Roman

character. Our own letters are neither the runes of the Vikings, nor the black letter of the Gothic and the Teutonic, nor the crude characters of the Anglo-Saxon. Six countries,—Turkey, Persia, Egypt, India, Afghanistan, and Abyssinia,—and probably 500,000,000 people, use the alien Arabic character in transcribing more than a hundred different languages and dialects. The Japanese themselves are using the borrowed ideographs of China. The adoption of *Romaji* meant only another change, and a change for the better.

The principal objection was that the adoption of *Romaji* would cause great changes in the Japanese language itself. The first change will be the abandonment of the ancient idiom known as the "classic," or "literary," or "written," or "book language," which is affected by the scholars and is not understood by the people. It bears to modern colloquial Japanese about the relation that Chaucer's idiom bears to Macaulay's. Then must follow the selection of some one of the many colloquial dialects as the na-

tional speech. This is certain to be that of the capital, Tokyo, although it will probably take over a large body of words and idioms from the colloquial of the old capital, Kyoto, which was formerly the standard colloquial. Finally, there will come, parallel with these changes, a movement toward simplification. Grammatical forms will be greatly reduced in number; an alphabet will displace the syllabaries; the numberless "honorifics" and "humble" forms, now heard in every sentence, will be lopped off as unsuited to the succinct and close-girt speech of the modern world; and the awkward and tottering sentences of Japanese will be reconstructed and disciplined until they shall march in the new literature of Japan in as trim and beautiful order as the splendid troops of the empire.

These will be the first great effects of the adoption of *Romaji*; and as all are in the direction of simplification and progress, they will commend the reform to the most liberal minded of the Japanese. The higher and more complex civilization becomes, the simpler is the language it demands. The most tangled jargons are found among the lowest races and tribes. Then follows the period when an evolving civilization and an aspiring literature formalize the language and create an intricate system of grammar, as in the case of the Sanskrit, Greek, Latin, Arabic, and German. The great literary tongues will eventually break these fetters; and we have in Persian, French, and English examples of wonderful and beautiful simplicity. Like the Roman legions, they shortened their weapons and extended their boundaries. While the Germans have astonishingly clung to their medieval grammatical shackles, the Japanese have really done worse, having retained a form of speech that they brought with them out of the savage forests. The nature-worshiper, the idolater, the barbarian, may still be seen in the language used by the most cultured people of Asia and the most artistic people of the modern world. But the Japanese have finally advanced beyond the Germans, and are awake to the necessity of a clear, succinct language, clearly and succinctly written.

The reform, however, will mean, both for Japan and the outside world, very much more than the simplification of the Japanese language. It will mean, chiefly, the opening of a new era in Japanese literature. For the first time in its history, the Japanese will be a true literary language. Heretofore, the national tongue has been kept a close prisoner in the citadels of scholars. It is not known to the people, from whose hearts must spring the true poets and thinkers of the land. The scholars have pro-

duced labored and valuable volumes on grammar, philosophy, and history; but the Japanese have no great poet,—no Dante, no Shakespeare, no Firdousi, not even a sweet singer like Keats. And yet the words of the language are marvelously beautiful, filled with tenderest sentiment, surcharged with exquisite and mystic suggestion. It has not even a great creator of tales, like Sa'di, or Froissart, or Boccaccio, or Dumas. And yet no people has a history richer in material for story and romance. Balzac would have reveled, as a future Balzac shall revel, in the "fresh woods and pastures new" of this once fierce and terrible, now mystic, dreamy, and poetic land. And yet the greatest, certainly the most popular, romanticist of Japan is the story teller, Encho, who, like an Arab *Maddah*, told to chance audiences his half-improvised tales as he fashioned them anew in his fancy.

After simplifying the language, and, at the same time, making it more plastic and more pliant, this great reform will restore it as a new gift and inspiration to the rejuvenated minds and hearts of Japan. What may not this exquisitely poetic, imaginative, and alert race fashion out of such splendid material as their strong and beautiful language and their marvelous, artistic temperament? We may justly expect the dawning and the early day of a magnificent literature in Japan. Alphonse Daudet once said, in speaking of Turgueeff: "What a luxury it must be to have a great, big, untrodden barbaric language to wade into!" The Japanese is a "great, big, untrodden," though not entirely a "barbaric," language. It is essentially fresh, as fresh as Greek in the time of Homer, as Italian in the time of Dante, as English in the time of Shakespeare; and its singers under the new inspiration will soon show that, like Marlowe, they have in them "those brave sublunary things that the first poets had."

To the outside world the reform will mean the real opening of Japan. Japan will lose much of its mystery and charm, but it will add much to its prosperity and advance its civilization. Where one foreigner now stammers or halts in his efforts to speak or read Japanese, a thousand will soon read and speak it with ease. Travelers, traders, and investors will hasten to explore a new and profitable field, and the daily press of Japan, intelligible at last, will reveal the life and thought of the people. This fuller knowledge of Japanese life will serve to make Japanese literature a portion of the treasure of the educated world. As the Renaissance gave life and voice to Greek art, so the knowledge of the Japanese language will create for us the delicate, almost evanescent, art of Japan.

RADIUM AND ITS WONDERS.

BY GEORGE F. KUNZ.

RADIUM belongs to the elements of the alkaline group,—such as calcium, strontium, barium, and thorium,—coming between barium and thorium, and having a special affinity for the former.

At the International Chemical Congress in Paris it was proposed by M. Gramont and agreed that no new substance could be described as an element unless its spark-spectrum had been measured and shown to be different from every other known form of matter. This was considered to have been one of the most important transactions of the international congress. It is remarkable that the application of this rule was first illustrated in the recognition of radium as a new element. It rested with Demarçay to find that radium was characterized by a special spark-spectrum of fifteen lines, with no lines of any other element.

Radium, as a metal, belongs to the alkaline group of elements, and its place in the table, according to Mendeléef's periodic law of atomic weights, is between barium and thorium, as carefully determined by Madame Curie, who makes the atomic weight of radium, by chemical methods, to be 225 (barium being 136.4, and thorium 230.8). Prof. W. N. Hartley, however, from a remarkable study of the spark-spectra of these and related elements, assigns to radium a weight of 257.8, considerably above thorium. As to its truly elementary character, however, and its close relation to barium and the other members of this group, Professor Hartley's spectrum results yield full confirmation.

SOURCE OF RADIUM.

Radium is obtained from pitchblende, or uranite, a mineral found in Saxony, Bohemia, Cornwall, Colorado, and various other localities. This is a black, heavy, pitchy-looking substance (whence the name), sometimes with slightly mammillary or rounded surfaces, sometimes crystallized. Chemically, it is a complicated substance, a combination of two oxides of uranium, with those of lead and of a number of rare and peculiar elements in small amounts. It has long been the principal or almost the only source of uranium, which has been extracted from it, leaving all the rare substances in the hitherto unused residue. Many of the compounds of uranium are brilliantly colored, and produce the peculiar yellow in uranium glass and in certain dye-stuffs.

M. Henri Becquerel, the eminent French chemist and physicist, found that when uranium was exposed to the sun's rays it apparently had the power of absorbing them, and would then cause an action upon a photographic plate. The fact this property was found in the metal uranium led him to think that possibly using the ore that uranium came from might give the same result. He, therefore, took a specimen of pitchblende, some object, and a photographic plate, intending to expose it to the sun's rays. As the day proved cloudy, he did not do so, but laid the photographic plate, with its black protective paper over it, in a drawer, placing upon it the pitchblende and the key or other object that he contemplated printing with it, and forgot the whole matter for several days. On again taking up the specimen to see if anything had happened to it, he found, to his surprise, when the plate was developed, that the pitchblende had really printed an image of the key upon it.

This discovery naturally attracted great and immediate interest among students of chemistry and physics, and many investigations were begun along this line. Here was evidently an unknown substance possessing extraordinary properties.

Becquerel had supposed the photographic action of uranium to be due to an absorption and a subsequent emission of sunlight; but the indications now pointed to a new substance that could itself produce photographic images in the dark by what were spoken of as "Becquerel rays."

Prominent among investigators who now took up the inquiry were Madame Curie, a Polish lady, and her husband, Prof. Pierre Curie, of the École Polytechnique at Paris, who have obtained results of wonderful interest. They set out to find the new element, and have succeeded. In this epoch-making investigation, Madame Curie was the pioneer, her husband being led to join in it by her remarkable enthusiasm.

The Curies, realizing that such a substance must exist in a greater proportion in pitchblende than in uranium, undertook to separate the unknown body, whatever it might be, from the pitchblende, and found not only one but two distinct substances, possessing what were known at first as the Becquerel rays, and which since then Madame Curie has termed radio-active properties,—namely, radium and polonium. The latter

was named from her native country, the former from its wonderful powers. It is of radium that most has been said and heard thus far, and of which we shall principally speak here.

Pitchblende is an exceedingly complex mineral, containing eight or ten elements, requiring ingenious chemical methods for their separation ; with these are minute and varying quantities of as many other elements, more or less rare. The pitchblende residue, after the uranium oxides, which constitute some three-fourths of it, have been removed, contains all the other metals that enter into it ; and from these the new substances that possess radio-active properties have to be separated with great care and difficulty. This residue material, heretofore of little or no use, has accumulated in large quantities at the works where uranium and its compounds have been prepared ; and the Austrian Government placed a ton of it, from the works at Joachimsthal, Bohemia, at the disposal of the Curies for their researches, and authorized the mine directors to furnish several tons more.

Madame Curie notes the presence in this residue of three radio-active bodies,—polonium, radium, and thorium, which last was not a new element. Polonium seems related to bismuth, separating with the latter, while radium accompanies the barium obtained from pitchblende, resembling it in its reactions, and separated from the barium by the difference of the solubility of the chlorides in water or alcohol containing hydrochloric acid.

Although radium is found in connection with barium in pitchblende, the Curies have found, by the examination of many barium compounds, that it is not the accompanying constituent of barium minerals. Barium is best known in the mineral barite,—a sulphate which is extensively used to mix with white paint, as it is claimed that it does not disolor, and is added to the white lead or paint rather because of its lower price than for any qualities that it imparts to them. The search to-day is for minerals in which may be found an occurrence of radium. It is believed to exist in sea-water. It is possible that large quantities of it may be found in some mineral vein, perhaps even of common minerals, when the search has proceeded far enough. This was the case with the earth thorium, employed for the incandescent light. Used first some twenty years ago, at which time monazite, the thorium ore, was a rare mineral, it was finally found by the ton in the gold sands of North Carolina. In Brazil, it forms also a beach sand, and can be gathered by the shipload. It now constitutes a government concession.

An experiment is now being made by a Buf-

falo concern, who are bringing on two carloads of carnotite,—one of the uranium minerals,—whose purpose it is to separate this and prepare from it a radium barium carbonate. Several scientific men have become interested in the venture.

The remarkable power possessed by radium, and the affinity that it has for barium, is illustrated by the fact that if radium and barium salts are mixed together, the radio-active properties are imparted to the latter before they can again be separated from the radium, although the radium holds all the radio-active properties and the barium of itself has none.

The fact being once determined, that the pitchblende residue thus contains at least three radio-active elements, two of them new to chemistry, the next step must be to distinguish the various forms in which this radio-activity operates in the case of the several elements, carefully separated from each other and tested individually. All the earlier observations, and many of the recent ones, involved the combined action of these different bodies ; and no full and clear understanding of the subject is, of course, possible until these distinctions are brought out. Something has already been done along these lines, but much more remains for determination. The whole body of chemical and physical workers are, however, most actively engaged in this new and wonderfully interesting field, and the advance will be very rapid.

ISOLATION OF RADIO-ACTIVE PROPERTIES.

The wonderful discovery of the X-rays, by Roentgen, and the strong properties which this force possessed in penetrating various opaque substances, caused the entire scientific world to become interested in investigating the qualities of every form of light and of substance producing it.

G. Niewenglowski (1)* observed that sulphide of calcium possessed the power of printing through paper which was not affected by sunlight, and through certain metals, forming skia-graphs (shadow-pictures), on the photograph plate. Troost (2) further found the same quality to be possessed by Sidot's blonde, the hexagonal sulphide of zinc. Becquerel (3) then discovered that the blue and blue-green phosphorescence of sulphide of lime, although in a sealed glass tube, could penetrate through 2 mm's. (1-12 inch) of aluminum, and then affect a photographic plate. This fact was further substantiated by W. Arnold (4). G. Le Bon (5) then

* (1) Compt. rend. 122, p. 384, 1896; (2) Compt. rend. 122, p. 564, 1896; (3) Compt. rend. 122, p. 559, 1896; (4) Wied. Ann. 61, p. 316, 1897; (5) Compt. rend. 122, p. 188, 1896.

announced, after a great series of photographic experiments, that sunlight exerts on all bodies an effect which is to the eye unrecognizable, but a radiation which acts on the bromide of silver and gelatine photographic plates. This action he named "dark light." What had been termed "dark light" is also an afterlight of fluorescing bodies, and the yellow-green uranium glass sends out rays that penetrate opaque bodies, as do the Roentgen rays (6).*

Henri Becquerel began his classical work in this line, finding that the salts of uranium—such as potassium-uranium sulphate—printed through plates of aluminum; showing that there was a relationship between the visible luminescence and fluorescence with the invisible, in the penetration of their rays through metal. He soon discovered, however, that there was a difference; the latter representing the Roentgen rays, whereas the activity of the potassium-aluminum sulphide, the zinc Sidot's blonde, and other bodies that phosphoresce in the dark, possess the property of uranium, which emits deeply penetrating rays, even when these substances have been isolated for months from all light (7).

These uranium rays, originally discovered by Becquerel, act upon photographic plates screened from the light. They can penetrate all solid, liquid, and gaseous substances, provided the thickness is not too great. Passing through gas or air, they render it a conductor of electricity, though only to a slight degree. Crookes has shown that polonium rays fail to penetrate glass, and are interfered with even by thin paper. They have little penetrating power in quartz, fluorspar, or mica, which readily absorb them; whereas these latter substances, like glass, are penetrated freely by radium emanations.

A third radio-active element, closely related to thorium, has been recognized by M. A. Debierne, who has been working somewhat in association with Professor Curie. For this, the name of actinium is proposed, from the Greek *actis*, a ray,—the name being practically a Greek translation of radium. M. Debierne has lately published an article in the *Comptes Rendus*† on the distinctions observed by him in the behavior of the radiations or emanations from actinium and radium, which present differences that appear quite sufficient to distinguish the two sources. These consist chiefly in their manner of diffusion and the time in which their effects on other bodies continue after the source is removed. Similar differences appear in the action of thorium also, as compared with both radium and actinium.

* (6) Compt. rend. 122, p. 500, 1896, Becquerel and d'Arsonval; (7) Compt. rend. 122, p. 420, 501, 559, 689, 762, 1086, 1896.

Another very curious relation has been recognized by the eminent physicists, Sir William Ramsay and Mr. Frederick Soddy, of Montreal.* In the gases evolved from radium bromide they obtained a spectrum that to their minds clearly proved the presence of the rare gas helium. By a very delicate method,—using only one six-hundredths of an ounce,—they were able to obtain from the emanations of this small quantity of material, at the expiration of five days, enough of the gas to determine by the spectroscope that helium was actually present (August 28, 1903—*Chemical News*). As this element is an important one in the photosphere of the sun, and was named from that fact, while extremely rare on the earth, this determination is of great interest.

THE NATURE OF RADIATIONS FROM RADIO-ACTIVE BODIES.

Another most important problem,—already familiar and even yet unsolved in the somewhat similar phenomena of the Roentgen rays,—is that of the nature of these radiations,—or, as some call them, emanations,—from substances having these peculiar qualities.†

The tendency of opinion among scientists is toward the view that some, at least, of these radium emanations are truly material particles, and not undulations in the ether or any other medium. Sir William Crookes described three kinds, as being (1) identical with the "cathode" stream,—free electrons,—or matter in the fourth or ultra-gaseous state; (2) true atoms, positively electrified,—large bodies compared with the former; they render air a conductor and act on photographic plates, but are easily checked in passing through material obstructions; (3) very penetrating rays that accompany the others, and are identified by Sir William Crookes with Roentgen rays. Other observers, however, find important differences from the latter.

Of these three groups, the rays of the first are deviated strongly in a magnetic field; the second very slightly, and the third not at all. All produce photographic effects, and excite phosphorescent bodies, but with decided differences. The first and third act strongly on barium platinocyanide, but feebly on Sidot's blonde; while with the second set, the reverse is the case.

If a piece of radium nitrate be brought near a surface coated with Sidot's blonde, the latter begins to glow. This effect is at first shown by the appearance, when examined with a lens, of brilliant points or sparks. As the radium is

* Vol. 136, No. 7; Feb. 1903, pp. 446-449.

† British Association, 1903; Section B. Chemistry; opening address of the president. *Nature*, Vol. 68, No. 1768, September 17, 1903.

brought nearer these increase in numbers, "until the flashes follow each other so quickly that the surface looks like a turbulent luminous sea." Here, Sir William Crookes says, we seem to be actually witnessing the impact of the flying atoms on the surface of the blonde, as they are projected from the radium with a velocity comparable to that of light-waves.

Dr. Crookes has devised a little instrument to show this remarkable phenomenon, which he calls the spintharoscope, consisting of a small surface coated with Sidot's blonde, just above which is a little pointer, like the second-hand of a watch, carrying a bit of a radium compound of high activity; above this is a lens. When looked at in the dark, as soon as the eye becomes accustomed to the darkness, the effect is that of beautiful scintillations produced by a shower of stars, showing most pleasingly the action of a radio-active substance upon one that is responsive to this property; and by moving a tiny wheel the shower continues beautifully.

The three kinds of emanations thus distinguished by Sir William Crookes correspond to what are called by Rutherford the beta, alpha, and gamma rays, respectively. These have been very fully described and distinguished by Madame Curie, and are referred to further on.

SOME PROPERTIES OF RADIO-ACTIVE BODIES AS SHOWN BY EXPERIMENTS.

With a view to examine the influence of radioactive bodies on minerals, and especially gem-minerals,—as illustrated so strikingly in Dr. Crookes' experiment with the Sidot's blonde,—that an investigation at the American Museum of Natural History was lately taken up by the writer and Dr. Charles Baskerville, of the University of North Carolina. Special facilities were furnished by the museum authorities; the great collections were opened to our use,—the Bement-Morgan and Tiffany-Morgan collections; and a supply of radium salts of 300,000 activity was procured by a special contribution. Our studies comprised ultra-violet light, Roentgen rays, and radium salts, as sources of activity. The results were of great interest, and will be published separately; an abstract was presented, with demonstrations, to the opening meeting of the New York Academy of Sciences, on October 4, 1903.

Some minerals were responsive and others were not; the same mineral in many cases was responsive in some specimens and not in others,—showing thus the presence or absence of some responsive substance not belonging to the ordinary constitution of the mineral itself. Many beautiful and remarkable results were obtained

which cannot be dwelt upon in detail here. In general, it was found that the most sensitive and responsive substances are:

First, the substance occurring in certain forms of diamonds, principally those from the Ba. gagem Mine in Brazil, and also from British Guiana; this is possibly a hydro-carbon, or else some one of the rare earths, which gives diamonds the blue-white color, as it has been termed for more than a century. These specimens respond intensely.

Second, willemite, a natural silicate of zinc found as an important ore in the zinc mines of Franklin, N. J.

Third, kunzite, the lilac-colored spodumene gem found in California during the past year, is wonderfully responsive to radium. Dr. Baskerville and the author found that 600 grams of kunzite crystals lit up with a pinkish-yellow glow when the one-eighth gram of (300,000) radium was brought near them. This observation has been further sustained by Sir William Crookes, who writes the author, in a letter dated October 9, 1903, as follows:

"But the most interesting thing to me is the effect of radium on it. A few milligrams of radium brought near to kunzite makes it glow with a fine yellow light, which does not cease immediately on the removal of the radium, but persists for several seconds. I have found some diamonds phosphoresce brightly under the influence of radium, and have been searching for a mineral which is equally sensitive. I think this lilac variety of spodumene runs the diamond very close, if it does not surpass it sometimes."

Fourth, the artificial phosphorescent sulphide of zinc, known as Sidot's blonde.

These, as well as many others, show wonderful responsiveness, sometimes by fluorescence, and sometimes by phosphorescence.

Sir George Stokes gave the name of fluorescence to the phenomenon which certain substances present in causing the very short waves of ultra-violet light to transform themselves into vibrations of greater length, so as to become visible to our eyes.

The word phosphorescence is from the Greek, meaning light-bearer, the name given to phosphorus, which glows or shines in the dark. It is applied to bodies which become luminous under various conditions, and remain so for a greater or less time, but without the change of length in the light-vibrations that is involved in fluorescence. Dr. W. Goold Levison, who has given much time to the study of phosphorescence and fluorescence, holds that phosphorescence is a reverse change of fluorescence. The luminosity of phosphorus itself is due to slow oxida-

tion, and has no relation to real phosphorescence except in general aspect.

The penetrative power of radio-active substances traverses all matter in greater or less depths. The following test, made by the author, will show the penetration possible with a greater variety of substances intervening, than in any recorded experiment :

Radium bromide, of 300,000 activity, was placed in a sealed glass tube inside of a rubber thermometer-holder, which was tightly screwed to prevent any emanation of any kind from passing through the joints. This was placed under a heavy silver tureen fully one-sixteenth of an inch in thickness ; upon this were placed four copper plates, such as are used for engraving ; upon this a heavy graduated measuring-glass 10 cm. in diameter ; this was filled with water to a depth of six inches. A diamond was suspended in the water and immediately phosphoresced. Whenever the tube with radium was drawn away more than two or three feet, the phosphorescence ceased ; whenever it was placed under the tureen the diamond immediately phosphoresced again. This experiment proves that the active power of the radium penetrated the following substances :

Glass in the form of a tube, sealed at both ends ; the rubber thermometer-holder ; silver tureen ; four copper plates ; a glass vase or measuring-glass one-quarter inch in thickness ; three inches of water.

There is no previously known substance or agent, whether it be even light or electricity, that possesses such wonderfully penetrative powers.

Radium action will pass through several books or a large dictionary with the same ease as through four or five inches of oak or pine wood. The penetration is almost instantaneous. If a piece of willemite or a diamond is placed upon the top of a thick box,—we say a box, because if it were a flat board the rays might pass under the edge and over on to the board itself,—the phosphorescence immediately is apparent. On removal of the radium to the right or the left, a distance of more than from four to six inches, the phosphorescence or fluorescence ceases immediately, returning as quickly whenever the radium is again brought near.

THE ENERGY OF RADIUM AND HOW COMPUTED.

The energy of radium is calculated upon a basis in which the standard of the radio-activity existing in metallic uranium is taken as one. At the present time radium has been so concentrated that it is claimed by the Curies that an activity of 1,800,000 has been obtained.

To produce this enormous degree of activity,

uranium-radium chloride crystals are dissolved in water and allowed to recrystallize. The crystalline part being preserved, whatever remains in the solution is washed off. Acid is added to the crystals, then water, then it is recrystallized, and the solution poured off again. This process is carried on for an indefinite period—what is known as fractionation ; each time a greater amount of radio-activity is concentrated into the crystals that remain,—the weaker uranium being poured off.

The manner in which the energy or activity of radium and similar substances is measured is too elaborate to be explained in a brief article like the present. The very delicate apparatus devised for this purpose by the Curies depends upon the fact already noted, that the emanations from radio-active bodies render air or other gases through which they pass conductors. Placing a layer of such a substance on the horizontal plate of a plate condenser, the upper plate is connected with an electrometer and with the ground, and its potential is hence normally that of the ground. The lower plate is raised to a high potential by means of a battery ; and the intervening air being rendered conductive by the radio-active body, a current is set up between the plates. If the ground connection of the upper plate is now broken, the plate becomes charged, with a deflection of the electrometer, proportional in rapidity to the strength of the current, which is thus rendered measurable.

A more delicate modification of this instrument, by means of a quartz electric balance, is too detailed for description here.*

When radium of a certain activity is spoken of,—say, 100 or 100,000,—it is meant that the radio-active energy of the compound referred to is that number of times greater than that of metallic uranium taken as unity. It has been mentioned above that the claim is made that radium preparations have been produced that have an activity of 1,800,000 ; and the writer himself conducted his recent experiments upon minerals, together with Dr. Baskerville, at the American Museum of Natural History in New York, with radium salts that were asserted to have an activity of 300,000.

It is fair to state, however, that in respect to these values of radio-activity there is yet a certain amount of discussion between the German and the French investigators. Director W. Markwald, in a recent communication to a correspondent in New York, says that to speak of radium of 300,000 activity seems to him like a hoax ; and that no scientific man should take

this expression seriously, as he believes that if metallic radium is ever obtained, its activity will not exceed 100,000. This view is reiterated by Geitel, who also states that these activities are only surmised,—that they are not accurately determined, and cannot be sustained by definite measurements. It may be that these enormous estimates have been induced by the popular love of high figures—whether it be money or activity—and that 100,000 may prove to be the highest activity of even pure radium, estimated on the basis of metallic uranium taken as 1.

Be this as it may, however, there is no question that pure metallic radium would be a most serious material to deal with. Professor Curie has said that he would not dare to venture into a room where there was one pound of this extraordinary body,—lest it should destroy his eyesight, and perhaps even his life also, by scorching the skin from his body. A minute quantity of a radium compound of a high intensity, carried in a sealed glass tube in the pocket, by M. Becquerel, produced a persistent sore on the adjacent part of the body which took fifty-three days to heal.

Three kinds of radio-activity have been recognized from this anomalous substance, known respectively as the *alpha*, *beta*, and *gamma* rays.

The *alpha* rays are very easily absorbed by solids, apparently carrying positive electric charges. The *beta* rays are more penetrating than these, and are negatively charged. The *gamma* rays have intense penetrating power, producing radio-activity through three or four feet of air, but they have no electric charge at all. These three forms of emanation have been discussed somewhat fully by Hon. R. J. Strutt, Fellow of Trinity College, Cambridge, in a communication to the Royal Society, August 5, 1903, as well as in some previous papers. The *gamma* rays have been regarded by some as identical with Roentgen rays; but Mr. Strutt points out that, though resembling them in some respects, they are yet clearly different. As previously stated, there is a strong tendency to regard some, if not all, of these very peculiar radiations as not undulations, like ordinary light-waves, but as actual emanations,—minute particles projected from the radio-active body into surrounding space. Sir William Crookes, the very eminent physicist, holds decidedly to this opinion, with regard to some at least of the radium activities.* Among other interesting facts concerning the wonderful energy of radium may be noted the following:

1. Professor Rutherford has shown that a

gram of radium is capable of giving forth 10.9 m.—without reference to gravitation.

2. The loss of one mil. per square c.m. requires one thousand million years (Professor Becquerel).

3. Professor Rutherford has recently shown that a gram of radium is capable of giving forth 10 1-9 m. calories. If, then, the sun were made of such a radio-active material, it would be capable of emitting 10 1-9 m. calories without reference to gravitation. This energy is nearly forty times as much as the gravitational lost energy of the homogeneous sun, and eight times as much as Lord Kelvin's conjecturally concentrated sun.*

PHYSICAL AND CHEMICAL PROPERTIES OF RADIUM.

As the electric furnace has given us carbon-dum, artificial graphite, and a series of absolutely new carbides, because with it we have attained temperatures of height unknown before its introduction,—so radio-active bodies may give us the means of identifying substances that all our former means of observation have escaped, and it may be that we shall have a new series of elements.

Somewhat as feathers, paper, and other light objects are attracted by pyroelectric substances and iron, nickel, and cobalt by magnets, and these themselves may in turn become electrified or magnetized, so we may have substances that respond to radio-activity or to ultra-violet light, or Roentgen rays—either or all.

The chemical action of radium upon glass is so strong that the colorless glass tube in which the 300,000-activity radium was placed, when exhibited at the Museum of Natural History, became almost black in twenty-six days. A second tube is now colored the same way in the same time. It requires but a few days to change many forms of glass to a violet color; evidently producing a chemical change in the iron and manganese, or both, which are used in glass manufacture; hence, the author suggests the use of rock-crystal as a medium for holding radium; which at the end of one month is found without any visible change having taken place in the crystal. Radium is one of the few substances that maintains a temperature of from two to five degrees above the surrounding atmosphere. This is a most anomalous property, and one that involves, or at least suggests, the most far-reaching results in our conceptions of physics.

We are informed that there is now being imported a sample of German radium of great activity and yet *not* luminous. That it is not a

* *Chemical News*, vol. 87, No. 2269; May 22, 1903, p. 241.

* *Nature*, vol. 68, No. 1769, September 24, 1903, p. 496.

luminous property in radium itself that induces luminosity in the willemite, diamond, etc., is clearly proven by the fact that we may cut off every possible form of light access, with rubber, iron, copper, lead, and wood, and then, as with the Roentgen rays, it is not the light but a radio-activity that produces the effects. That luminosity is not responsible for the activity can be shown by a sample of low luminosity—radium barium carbonate,—that scarcely shows the faintest light and yet acts immediately, either when placed near or when mixed as granules or powder with willemite, diamond, zinc sulphide, zinc oxide, anthracene, and other like substances. It acts instantly even with the interposition of the pasteboard box,—which surely further precludes any possibility of light passing through.

These are evidently gamma rays ; or else the facts may indicate, as has before been suggested, that we may find two elements in radium,—as we have oxygen and nitrogen associated in the air.

ACTION OF RADIUM ON ORGANIC BODIES.

In regard to the injury that radio-activity may cause to living organisms, the case of Becquerel himself, who carried a tiny tube containing radium in his vest pocket, has already been mentioned. A sore was produced on his side which, notwithstanding every possible effort, required many weeks to heal. The Curies have placed small quantities in phials at the backs of the necks of rabbits and other small animals, resulting in twenty-four hours in very serious action to them. By inserting a small quantity at the back of the neck into the flesh, the animals died in a short time.

It is undoubtedly true, however, that there has been much exaggeration in regard to the injurious results from the use of radium. About its marvelous penetration there is no doubt. It does penetrate the human flesh, for the writer has had a diamond phosphoresce brilliantly in the palm of his hand when the radium was held below the back of the hand.

The writer at one time had a swollen face which he is quite sure could be traced to a previous eruption on the lips, probably due to cold or fever, which possibly in many instances would have been attributed to the action of radium. Nevertheless when, as has sometimes occurred, the radium does produce a tissue destruction, the blisters and ulcerations of the flesh which are so caused are of remarkable physiological character, and are extremely difficult to heal.

Mr. Henry Crookes, F.C.S.,* exhibited a number of plate cultures and photographs illustra-

tive of the bactericidal properties of the emanations from radium. Various cultures of bacteria were exposed to the action of ten milligrams of bromide of radium through a mica screen at about one inch distance from the surface of the plate. After having been subjected to the action of the radium emanations,—“electrons” in these cases,—the plates were incubated for twenty-four, forty-eight, or more hours. In every case it was found that the microbes were killed where they had been exposed to the radium, so that, on incubation, a bare space, free from bacterial growths, was left on the plate opposite the point where the radium had been placed. Among the bacteria experimented with were *B. liquefaciens*, *B. coli communis*, *B. prodiclosus*, etc.

Frederick Soddy, in the *British Journal* (see *Nature*, Vol. 68, July 25, p. 226), states that five minutes' application of radium is equivalent to ten years' application of thorium, although both instantaneously produce radio-active emanations of gases in infinitesimal quantities. He believes it possible to inhale the emanations of both these substances for the treatment of consumption. The maximum possible dose of radium solution should be the gaseous contents of a bubble ; a few bubbles each breath every twenty-four hours.

THE MONETARY VALUE OF RADIUM.

In regard to the value of radium, radium chloride of the activity of 240 sells for about \$30.00 an ounce. The radium salts used by the author in the experiments at the American Museum of Natural History, 127 milligrams,—equal to about one-eighth of a gram, or 1.249 of an ounce,—represented a value of \$274.00, or a rate of \$64,800.00 per ounce troy. This radium was of the activity of 300,000.

The museum ordered, at the request of Edward D. Adams, of New York City, and as a gift to carry on the investigations, radium of an activity of 1,800,000, valued at \$660 for 100 milligrams, or at the rate of \$198,000 per ounce. The small sample used represents the concentration of more than one ton of pitchblende ; the 1,800,000 sample, probably, the concentration of four or five tons, and yet the entire quantity could be put in the end of a thimble and not occupy one-fourth of the space remaining between that and the finger.

Radium compounds with an activity of 40 can be bought for \$20 an ounce. It is only when it has been fractionated and increased in its activity that it becomes very costly,—like steel, itself worth only a trifle per pound, but worth many times the value of gold when manufactured into watch-springs !

* “Bactericidal Properties of the Emanations from Radium.” Henry Crookes, F.C.S. C.N. 37, 2274, 306.

EARLY INVESTIGATIONS OF RADIUM—THE CURIES.

Having discussed the marvelous properties of the new element radium, we feel entitled to indulge in the privilege of a word concerning those through whose earnest efforts this new and valuable contribution to science has been given to the world.

Prominent among investigators who were the first to act upon the discovery of M. Henri Becquerel, were Madame Skladowska Curie and her husband, Prof. Pierre Curie, of the École Polytechnique at Paris.

Madame Curie is one of a race whose women have been among the brightest in all Europe, and among the most beautiful, also, like the celebrated Countess Potocka. Were it not for these brilliant women, Russia would never have had such difficulty in conquering the kingdom ; and it was that inborn spirit of patriotism, ever inherent among them, that expressed itself in Madame Curie's first impulse to name the new element polonium, in honor of her native land.

Madame Skladowska Curie has now been created a Ph.D., and her thesis for that degree, presented to the faculty of the College of Science of Paris, 1903, is written with a modesty that is both charming and striking, although it announced results of such extraordinary interest to science. It is not always, though, that a woman receives due recognition abroad, however admirable her work.

Those who were present at the International Congress of Chemistry, held at numerous sessions in the great hall of the Sorbonne, the Institute of Paris, during the Paris Exposition of 1900, may well remember with what dignity Dr. Moissan presided,—a magnificent type of Frenchman, a brilliant and fluent speaker ; a man of the greatest eminence in the scientific world ; one whose work on fluorine, whose discoveries of the many carbides, and the product of whose work in the electric furnace, have carved his name on the great rock of chemistry for all time. They could not fail, however, to be struck with the glance that he gave from the right to the left of the great hall whenever he addressed this great international gathering,—always beginning and ending his remarks with “Messieurs,”—never “Messieurs et Mesdames”—simply addressing the audience as gentlemen or sirs. As president, he must have known that there were lady members present from various parts of the world, and in that gathering surely was Madame Curie. It seems strange that in less than five years from that time a woman's name should be

connected forever with two of the most remarkable elements that have ever been discovered ; and that her name will thus be remembered when the other, perhaps, is forgotten. The question naturally comes to mind whether, at the next international gathering of chemistry, the president at that time can afford, either intentionally or through indifference to women workers, to fail of addressing the ladies also.

The discovery of radium may be compared to an illustration recently given by an eminent New York divine,—that is, that in all ages and periods there appears a great painter, financier, writer, or scientist, who makes some brilliant achievement, for which he receives all the honor, although there are many scarcely known painters, financiers, litterateurs, and scientists who have paved the way and contributed to the result. Radium was not discovered, by any means, without previous experiments ; it was a gradual evolution ; it was a natural outcome of the Geissler tube, the Roentgen rays, the ultra-violet light, the incandescence of thorium and other materials, and the investigation of the rare earths, which have held the attention of both chemists and physicists for the past ten years. There never has been more attention given at any period to the study of chemical physics than of late and at the present time.

The discovery of this class of bodies, the study of their phenomena and relations, and the isolation of these new, and in some respects anomalous elements, marks a “new departure” in chemical physics, and the opening of a great field of novel interest and of we know not what importance. Since the separation of radium by Madame Curie and her husband, it has held the interest of the entire reading world as not only a new element, but apparently a new force ; and its properties have commanded the attention and investigation of the greatest living physicists,—Professor and Madame Curie and M. Becquerel in France ; Sir William Crookes, Sir William Ramsay, Prof. J. J. Thompson, Sir William and Lady Huggins, and others in England ; Director Markwald of Berlin ; Professors Elster, Geitel, Haen, and other German scientists on the continent.

Some of the most important work done has been in the investigations of Prof. J. J. Rutherford and Messrs. Soddy, McLennan, Owens, and others, in Canada. The United States has contributed very little, up to the present, in original research, although the first book on the subject to be published was by Mr. W. J. Hamner, formerly associated with Mr. Thomas A. Edison.

LEADING ARTICLES OF THE MONTH.

A TALK WITH M. CURIE ABOUT RADIUM.

"WORTH three thousand times its weight in pure gold," said M. Curie, the discoverer of radium, to Mr. Cleveland Moffett, who writes of the discovery in the November *McClure's*. The talk with the scientist brings out many remarkable effects of the chemical: its capacity for harm and for help; the sensation of light within the eye when a radium tube is placed upon the lid; inexplicable explosions in experiments; the testing of diamonds by its light; its scarcity—perhaps a tablespoonful of purified radium in the world; its lighting power, a kilogram lighting a room thirty feet square with a mild radiance; and its warmth, a given quantity melting its own weight of ice every hour.

EXPERIMENTS ON ANIMALS.

The experiments described by M. Curie show that radium can by its mere presence annihilate animal life or plant life. "Here is one instance among many: On May 13, 1903, a little chloride of radium (five centigrams) was suspended over the cage of eight white mice, two parent mice and six little ones, and was left there for three days and then removed. The mice continued to eat and run about as usual until May 16, when the little ones began to lose the fur on their backs. On the 19th, their backs were quite bare of fur, although their heads remained covered, which gave them the appearance of little white lions. On the 21st, the little ones became blind, although they continued to eat well. On the 23d, one of the little ones died. On the 24th, three died. On the 25th, the remaining two died. On June 5, both the parent mice became blind. On the 28th, both the parent mice died. This was the work of a few grains of radium in a tiny glass tube.

"In another case, two full-grown mice were exposed continuously to the same quantity (five centigrams) of radium for ten days. For nine days they remained perfectly well, although they showed fear, but on the tenth day they died without losing their fur. This experiment was repeated with another pair of mice under the same conditions, except that the radium used was only half as intense, and in this case the mice died in twenty-two days and twenty-six days, respectively, and on the twentieth day they began to lose their fur. M. Danysz draws important conclusions touching the nature of the rays from

the fact that the mice did or did not lose their fur.

"Similar experiments were made upon other animals under varying conditions, the result being almost invariably death after a longer or shorter time, according to the animals' resistance. Rabbits were killed, guinea pigs were killed, embryo chickens exposed to radium rays during incubation (some on the first day, some on the tenth, some on the last day) were all killed, plants were killed, and M. Danysz is convinced that all animals, probably all forms of life, would succumb to the destructive force of radium if employed in sufficient quantities.

"I have no doubt," said he, "that a kilogram of radium would be sufficient to destroy the population of Paris, granting that they came within its influence. Men and women would be killed just as these mice were killed."

ODD EFFECTS OF RADIUM.

"I must pass rapidly over various other wonders of radium that M. Curie laid before me in subsequent conversations. There is matter here for a book, not a magazine article, and new matter is accumulating every week as the outcome of new investigations. Even in the chemistry of radium, which is practically an unexplored field, owing to the scarcity and costliness of the metal, there are various facts to be noted, as these: that radium changes the color of phosphorus from yellow to red; that radium rays increase the production of ozone in certain cases; that a small quantity of radium dissolved in water throws off hydrogen constantly by causing a disintegration of the water, the oxygen released being absorbed in some unknown molecular combination. Also that a solution of radium gives a violet or brownish tint to a glass vessel containing it, this tint being permanent, unless the glass be heated red-hot. Here, by the way, is an application of importance in the arts, for radium may thus be used to modify the colors of glass and crystals, possibly of gems. It is furthermore established that radium offers a ready means of distinguishing real from imitation diamonds, since it causes the real stones to burst into a brilliant phosphorescence when brought near them in a darkened room, while it has scarcely any such effect upon false stones. M. Curie made this experiment recently at a reception in Lille, to the great delight of the guests."

CONGRESS AND THE CURRENCY.

DIFFERING views of experts regarding proposed currency legislation by Congress are brought out in two articles contributed to the *North American Review* for October by President William A. Nash of the Corn Exchange Bank in New York and by President James H. Eckels of the Commercial National Bank in Chicago, respectively. In opening the discussion, Mr. Nash says :

"The salient fact that the *per capita* amount of currency in this country is, at the present moment, higher than it has ever been, and that it has steadily and regularly advanced during the past six years, shows that in a natural way, very little aided by legislation, the wants of the people for an increase of circulating medium—supposing these wants actually exist—have been met ; and they have been met by means that seem to me to promise most for the future adjustment and settlement of this question."

While it is true that the interest rates have been higher in recent years, still they have not been abnormally high, and, in Mr. Nash's opinion, the adequacy of the currency supply "for all legitimate and conservative enterprises and operations" has been fully demonstrated. The demand for asset currency is, therefore, unnecessary. The natural additions to the circulating medium of the coinage of gold, and the greatly increased use of bank checks as a substitute for currency, will, Mr. Nash believes, be sufficient to meet our needs as a people.

ABOLISH TREASURY HOARDING.

One very important defect in our financial system seems to demand the action of Congress. That defect lies in the imperfect methods of the United States Treasury in the receiving and disbursement of public funds :

"The only monetary disturbance of the past six years that created any anxiety was the crisis of November, 1902, when the accumulations of public money in the treasury, arising from large payments of duties and the inadequacy of legal provision for their redistribution among the people through the banks, resulted in congestion that threatened for a time to paralyze business. The exertions of Secretary Shaw, then new in office, to release the necessary funds are familiar to all readers. Also familiar are the ingenious and, as some have asserted, questionable methods he was obliged to employ to accomplish this desirable adjustment of an abnormal situation. The weight of opinion is in favor of Secretary Shaw's prompt action, but that there should exist legal doubts as to its propriety, while its wisdom was so heartily commended, brings us

to the one great need of legislation at the approaching session.

"The removal of this defect is paramount, and is at this time the only action required. Whatever may be the final form of the currency bill to be presented, any action which will make the Treasury of the United States a cooperator with the business man, and which will make the hoarding of money by the Government impossible, should receive the support of the press and the people. If we ship money to the West and South to move the crops, it can and does return to the center which needs it most ; if we load ocean steamers with ingots, there is always a possible way to bring them back ; but once the useful coin has entered the United States Treasury, it leaves not only hope behind, but a wondering and anxious business community of American bankers and merchants, the victims of their own governmental machinery. The most that can be hoped for from Congress is the correction of this clumsy system. If we must have elasticity, let us begin with the Treasury, and that, I candidly believe, will be enough for our present necessities."

A Plea for an Asset Currency.

Mr. Eckels, who was Comptroller of the Currency under President Cleveland, takes a far more radical position than Mr. Nash on the question of an asset currency. In his opinion, the banks should gradually be put in possession of the right of issuing notes against their commercial assets.

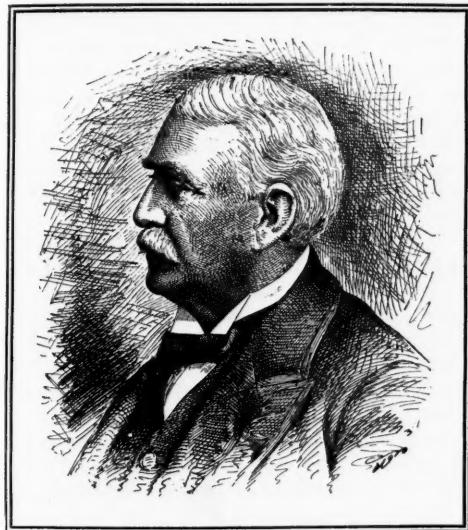
"No radical steps should be taken in this direction ; but, well safeguarded as to speedy redemption at convenient points, and with a general safety fund to guarantee redemption immediately upon the failure of any bank, these issues would be as safe as need be in the careful conduct of business. I do not believe in an emergency currency, though it be an asset currency regulated by a very high tax. It is far wiser to give banks the power that will prevent an emergency than to give them something that is a proclamation that they are in dire straits."

THE ABSORPTION OF OUR PUBLIC LANDS.

AVIGOROUS movement is under way in the West to bring about the repeal of certain laws under which the public domain, it is alleged, is being squandered in a way undreamed of by the originators of the homestead legislation of half a century back. One of the leaders in this movement is the Hon. Paris Gibson, United States Senator from Montana, who discusses the objectionable features of the laws

in the October number of *Forestry and Irrigation*.

Senator Gibson shows that in the six years ending on June 30, 1903, the Government parted with eighty-six million acres of public lands,—nearly one-half of this vast area having been taken during the last two years. In the Great Falls land district of Montana, one thousand desert land entries were made during the eleven months ending on June 30, and most of these



HON. PARIS GIBSON.

(United States Senator from Montana, and a leader in the movement to repeal objectionable land laws.)

entries, it is charged, were made in the interest of men who will never make homes upon the lands in question.

It is contended by Senator Gibson that the desert land act and the commutation clause of the homestead act, now in force, were never demanded by actual settlers, but were enacted at the behest of speculators and of individuals and corporations seeking to own and control large bodies of land for grazing purposes. One strong objection to the desert land act is that it does not compel residence on the land, thus permitting the speculator to employ agents to take up the land in his interest.

“Any doubt that the desert land law facilitates acquirement of land from the nation in large bodies by individuals and companies is dispelled by the clause adopted March 3, 1891, making it lawful for a person, after entry, to assign his desert claim to another person. It will be readily seen how difficult it must be for the Government, endeavoring to detect fraud, to de-

termine if an agreement to sell the desert land claim was made by the entry-man before filing it.

“Since the enactment of the desert land law immense bodies of land have been taken up and patented, upon which large crops of hay and grain are annually grown without irrigation, and in many places to-day little or no attention is paid to the requirements of the law as to the character of lands upon which desert land filings are made, and to the reclamation of lands that are desert in character. One would think, after reading the last annual report on the public lands by the Secretary of the Interior, that high-water mark in the exercise of land frauds had been reached under the timber and stone act, but in my opinion greater frauds are now being committed under the desert land act in the arid States than under all other land acts combined.”

THE DEMANDS OF HOME-SEEKERS.

The repeal of these laws would be a real boon to the actual settler and home-maker.

“The land policy of the nation is nothing short of downright injustice to millions of people of the United States who are seeking for homes upon the land. Some one will, doubtless, say there would be no cause for complaint of fraud if the provisions of these acts were properly enforced, and their constant cry is enforce the laws, enforce the laws. To such I would say, these land laws never have been enforced except in isolated cases, and I believe they never will be enforced so long as wealthy men and influential politicians are engaged in acquiring government lands. But, it is urged, if these land acts are repealed, thus leaving upon our statute books only the homestead act deprived of the commutation clause, thus cutting off the receipts of money from sales of land, the national work of reclaiming the irrigable lands of the arid States cannot be continued. If, in order to reclaim our dry lands, it is necessary to maintain upon our statute books acts that will practically dedicate the remaining public lands to a few capitalists and speculators instead of actual settlers, it would be far better that this beneficent national irrigation work should cease at once and forever; but this danger, apprehended from the repeal of these acts, has no foundation to rest upon; for, in accordance with the provisions of the irrigation bill, as fast as our public lands are reclaimed by the nation they are to be sold to actual settlers at a price that will fully reimburse the Government for its expenditures, and the fund that will be created,—now amounting to \$15,000,000 or \$20,000,000,—will be used over and over again in carrying out the national irrigation plans.”

FACTS ABOUT THE UNITED STATES POST OFFICE.

IN the first of a series of articles entitled "The Post Office and the People," in the November *World's Work*, Mr. M. G. Cunniff describes many discrepancies in our present service, and compares our facilities with those abroad :

Newspapers in the United States may be mailed free within the county of publication wherever there is no free delivery. Government documents and correspondence go free; nine-tenths of the matter passing through the Washington post office pays the post office nothing. Carloads of reports are carried about the country to the immense advantage of the railroads, but to the behoof of nobody else. An official at the head of a post-office division told me he had seen railway mail clerks heave sacks of the stuff to the coyotes of Montana to save the trouble of handling it. Publishers send newspapers and periodicals at a cent a pound to addresses outside the postal district of mailing; more than two-thirds of the total revenue-paying mail matter by weight is this. In these three kinds of mail the post office serves the people with more generosity—some of it gratuitous generosity—than European post offices, except that certain classes of publications in England have a very low rate. Even in handling all of these cheap-rate mails, however, the post office has recently curtailed its service. Move from your present address and none of the free or second-class mail will be forwarded. Not even the second-class mail sent at four cents a pound by publishers within the city of mailing, or by private individuals,—indeed, nothing but first-class matter,—will go beyond a single address. Yet with this restricted service these kinds of mail furnish less than 4 per cent. of the postal revenues.

As the third and fourth class matter nearly pays for itself, the first-class matter and postal cards, about 16 per cent. of the weight of the mail, now pays nearly 79 per cent. of the total revenue, or over ninety million dollars. This class of mail practically supports the post office, in so far as it is supported. But in handling it, and in providing conveniences for mailing third and fourth-class matter, our service is poor and inordinately costly.

It would be impossible in New York, for example, to send a letter, receive an answer, send again and receive another answer, all in a day, as in London. The pneumatic-tube service is very restricted. A letter posted downtown at 4 o'clock will not be delivered uptown in the resi-

dence district until the next morning. If packages are too bulky for the ordinary carrier, one must journey to the post office for them, and likewise one goes to the post office to cash money orders.

I asked a high post-office official why parcels are not delivered.

"The public don't demand it," said he. "They don't object to going to the post office."

EASIER TO MAIL VIA GERMANY THAN DIRECT.

Your neighbor may post a four-pound package to San Francisco for sixty-four cents. It would cost him the same to send it to you next door. A German might mail a ten-pound package from Germany to Salt Lake City; you could not, without paying prohibitory letter-postage rates. Mr. James L. Cowles sent a suitcase thus from New York directly to New Haven. The stamps cost \$3.68. He could have sent it via Germany for \$1.95. Offered at any post office as fourth-class matter, it would not have been accepted at all. It weighed eleven pounds. Practically, then, the United States post office says: "Send all but your smallest packages by slow and uncertain private express; and send all your urgent messages by expensive private telegraph," or put in a telephone.

Nor is the classification of mail free from deficiencies. The law admits to second-class privileges *bona fide* periodical publications, but the interpretation of the law is left to a single assistant postmaster-general, so that "only the Almighty and Mr. Madden," as a United States Senator has said, "know what is second class and what is not." Publishers whose publications are being summarily cut off from the cent-a-pound rate cannot see a post-office improvement in such a narrowing of privileges, however sincere Mr. Madden may be in his reform. It is, after all, the law rather than Mr. Madden that is to blame. In brief, the classification of mail is governed by laws fitted to another generation; it takes no heed of the problems of the day, as will be shown later in discussing the second-class matter.

Now, the fact that in the thickly-settled portions of the country, especially in the cities, the American service is poorer than the foreign is not meant to prove that the post office should add to its present expense, which is almost double that of England and France combined, exclusive of their telegraph system. The point made here is that the service needs a drastic reorganization of present items of expense, so that more economical management and arrangement will permit of improvements and of lower charges to the public for mailing letters and

sending parcels. Economically administered the department can improve city conveniences as sweepingly as it is now improving rural conveniences. Postmaster-General Wanamaker set in motion many of the reforms the post office needs. How have they failed of realization?

THE LABOR BOSS—THE TRUST'S TOOL.

MR. RAY STANNARD BAKER, in the November *McClure's* describes the octopus-like graft that has throttled building in New York recently, showing the relation to it of the labor unions, the labor boss, the independent builder, and, most important of all, the trust. Sam Parks, "ignorant, a bully, a swaggerer, a criminal in his instincts, inarticulate except in abuse and blasphemy, with no argument but his proficient and rocky fists, yet possesses those curious Irish faculties of leadership, that strange force of personality, that certain loyalty to his immediate henchmen familiar among ward politicians." By these he has grafted from employers and union alike, and for months held them quiet and docile in his hands, using each against the other. Neither the unions, the employers, nor the building department, in many cases, wish honesty, Mr. Baker says, and he shows how even the unions "graft" on each other. But the cause of it all, here as in politics, is higher up. He tells of the coming to New York of a certain construction company, of its rapid rise, of its merging into a trust, owned by great capitalists. He describes its methods of crushing independent builders by means of the labor boss :

"CORRUPTION A GOOD INVESTMENT."

"This may be laid down as a law : The larger the corporation the more danger of graft.

"This point of danger in the trust problem, has not, it seems, been sufficiently emphasized. The larger the corporation the greater the need of 'standing in' with the union. A general strike where enormous capital is involved is a very serious matter, not only for employer and employee, but for the public. The anthracite coal strike showed this conclusively. The more extensive its operations the less the corporation feels the small expense of owning delegates, and corruption becomes a good investment."

HOW WATERED STOCK LEADS TO "GRAFTING."

So conservative a financial authority as the New York *Evening Post*, criticising the first annual report of this building trust, which, it says (August 5, 1903), "has been conspicuously in the public eye in the last few months," concludes

that over half of its capitalization of \$66,000,000 is pure water and wind.

"In other words, the manager of the trust is set to earn dividends on a capitalization over half of which is water. Is it surprising if he tries by fair means or foul to control the labor market, the demands of which make up so large a proportion of the total out-go? His own business existence depends on his getting results. Will he buy human honor? Any one can answer that question.

"In one respect, indeed, there is the same fundamental difficulty and danger in the trust that there is in the labor union. In the union we have the conservative, respectable, 'honest' members, staying at home and leaving their collective business in the hands of a rascally walking delegate and profiting by his management. In the great modern trusts we have the respectable 'honest' millionaires, the Stillmans and the Vanderbilts, pillars of society, permitting the use of their influential names to float questionable companies, leaving their collective business in the hands of a manager, paying no attention to the manner in which he does the work if only he gets results, they profiting by his management.

"How likely we are to get our causes mixed up with our effects! Sam Parks no more caused this great strike than the man in the moon. Parks is an effect. It is not Parks who is at the bottom of the trouble, but Parkism. Parks is the visible sore of the disease, the invisible germ of which—money corruption—is circulating in the blood of the American people, and takes its victims high and low.

WHO IS RESPONSIBLE?

"The time must come when the responsibility for these dangerous conditions will be placed where it belongs ; upon the stay-at-home, conservative voter who regards politics as beneath his honorable attention ; upon the stay-at-home, conservative union man who does not wish to disturb his ease, to take part in the turmoil of the union meeting ; upon the millionaire stockholder in the corporation who sits at home and draws his dividends without knowing or wanting to know by what trail of blood and dishonesty they have been earned."

CANADA AND THE ZOLLVEREIN.

IN the current discussion of Mr. Chamberlain's tariff proposition which is now occupying so much space in the British reviews, the articles dealing specifically with Canada's relations to the proposed reforms are naturally of the greatest interest to American readers.

The Only Defense that Canada Needs.

Dr. Goldwin Smith contributes to the *Monthly Review* a very interesting paper entitled "Canada and Mr. Chamberlain." The article has really little to do with Mr. Chamberlain, and hardly mentions his name or his projects; it is rather a statement of the present condition of Canada, with merely an implication that any tinkering with the present state of things is fraught with evil. The only passage in which Dr. Goldwin Smith directly condemns Mr. Chamberlain's project is where he insists that reciprocity between Canada and the United States is the most immediate need:

"What is wanted certainly, and without delay, by all but the monopolists on either side, is the renewal of commercial reciprocity, which involves no political change. For this a strong movement is now on foot, initiated, strange to say, by New England, the mother of protection, but extending also to other and especially North-western States. Any British statesman who may succeed by proclaiming commercial war against the United States is defeating this movement; and at the same time, in depriving Canada, even for two or three years, of the bonding privilege, while he taxes her imperial armaments and wars, may chance to find that he has played over again the part of Mr. Charles Townsend as a consolidator of the empire."

Dr. Goldwin Smith denies that Canada wants any defense from England. "She, in reality, wants no defense but peace." England could not defend her against the United States, and therefore her only defense is not to become involved in war. Dr. Smith denies that there is any desire on the part of the Americans to aggress upon Canadian independence. But all through his article he emphasizes the fact that the links between the Dominion and the mother country have worn very thin, and that the French Canadians, though satisfied with British rule, are not permeated with British sentiments. There are 1,200,000 Canadian-born persons in the United States, and the continual transmigration from both sides leads to a unity of sentiment between both parts of North America. After delivering another warning against the danger to Canada of a commercial war with the United States, Dr. Smith says:

"What, after all, in an economical point of view, is this unity of the empire, for the consolidation of which commercial war is to be proclaimed against the world? What is the empire but the aggregate result of accidents of war and discovery, governed by no plan or regard for community of economical interests? What reason is there for presuming that all its parts ought,

in defiance of the indications of nature, and at great risk of incurring the commercial enmity of other nations, to be forced into a fiscal union?"

Real Federation.

Mr. A. H. Adams contributes to the *Nineteenth Century* an article entitled "A Colonial View of Colonial Loyalty," in which he, while declaring that Mr. Chamberlain's preferential scheme could not unite the empire, shows how union can be brought about. But before expounding his scheme he devotes several pages to what colonial loyalty means. The idea that the colonies are loyal to England is, he says, a mistake. First, their sense of loyalty is given to their own colony; secondly, to the empire at large; and lastly, to England. That being so, if a dispute arose, "the loyalty to England would not survive five minutes after the first angry word was spoken." As it is, Mr. Adams sees danger to the union of the empire from the distinct breach of sentiment between colonials and Britains. Mr. Chamberlain's move seems to him "entirely a leap in the dark,—a step fraught with the worst possibilities for destroying" the present good understanding. His suggestion is that, instead, the empire should be federated on a two-chamber basis,—the present imperial Parliament being ignored. The lower house, he suggests, should have twenty-six members, twenty representing the United Kingdom, and the senate twenty-one members, nine representing the United Kingdom. Differences between the two chambers should be settled by the two houses sitting as one, this arrangement giving the United Kingdom a majority of three.

THE FALL OF M. WITTE.

THAT M. Witte's supposed promotion to be president of the Russian Committee of Ministers was in reality his supersession became plain to every one as soon as the facts transpired. In the *Contemporary Review*, Dr. Dillon deals with the subject under the title of "M. Witte's Fall." The view that M. Witte will have any influence in his new position, says Dr. Dillon, is wholly erroneous, as the committee can neither make nor unmake a law. No president ever yet acquired any initiative or wielded much influence upon persons or agents, for good or evil. In other words, M. Witte has fallen; and Dr. Dillon reminds us that he foreshadowed this fall two years ago. His only hope is that, as he is but fifty-five years old, he may live to witness entanglements which he alone can unravel.

WHAT M. WITTE DID.

M. Plehve moved heaven and earth to undermine M. Witte's influence, and he was helped by the fact that the finance minister had always been hated by men who wasted their time in social frivolities. Dr. Dillon is only doubtful whether M. Witte's work was good or bad, but no one will dissent from his statement that it was Herculean. He sowed reforms with the sack, not with the hand. M. Witte let loose a myriad forces all at once, and scared the men of routine.

"He brought the elements of finance within the reach of the Russian official, raised the Imperial Bank to the level of a European institution, substituted gold for fluctuating bank-notes, and raised the powerful clique of bankers against him by penalizing profitable but unscrupulous speculations on a fall in the value of paper rubles. His enemies on 'Change were soon strengthened by the secession of the powerful military party, who detested in him the stanch champion of peace."

THE CAUSE OF HIS FALL.

But M. Witte's most ambitious undertaking was his attempt to create industries. To effect this he changed everything.

"Railway traveling was cheapened below the lowest limit known in western Europe, freights were lowered, waterways and railways were constructed with a view to bring sources of production nearer to the markets, the passport system was relaxed, even Jews were allowed to travel—on business, alcohol became a government monopoly, and rumors were circulated that many other branches of trade would also be taken over by the state."

But he could not make educated workmen, or prevent strikes, or prevent the industrial population becoming impregnated with Western ideas. And it was M. Plehve who had to cope with the conditions of unrest which M. Witte's policy had created. M. Plehve was, therefore, allowed to make his own conditions, and the first condition was that M. Witte should disappear.

"M. Witte was surprised by the news that his tenure of office had come to an end, and with it the success of schemes with which the prosperity of the empire is bound up. Ten or fifteen years more and the management of Witte's scheme might have been left to a third-rate successor; at present it is in a phase in which a false step may endanger the work of years."

Dr. Dillon thinks that M. Witte will come to the front again. Meantime, he says, the Czar is in the position of a mariner navigating unfamiliar seas, who has lost his steering gear and his compass.

THE MACEDONIAN INFERNO.

IN a well-written impressionist account of experiences in Macedonia contributed to *Blackwood's Magazine* for October, Mr. Reginald Wyon says :

"Ah! it is a sad, sad story, this, of the extermination of the Christians in Vilayet Monastir, under the unbelieving and unfeeling eyes of Europe, which once rose in righteous wrath at tales not more horrible. It was *one* massacre in Bulgaria that set Europe in a blaze a quarter of a century ago. Now a dozen equally terrible only leave us desiring the introduction of 'the reforms!' Nay more, our philanthropists are seeking to prove the Bulgarians guilty of equal atrocities, which are mostly absolutely false. Have you, good readers, ever tried to imagine yourselves for one moment in these poor wretches' position?"

What the capture of a Bulgarian town by Turkish soldiers means is vividly set forth in the following passage, which refers to Smilevo, destroyed by the Turks and Bashi-Bazouks on August 28.

"Smilevo is but *one* instance of *ninety*. Soldiers had come fresh from a defeat in the hills, and had suddenly surrounded the flourishing village, setting fire to the outer ring of houses. Then, as the frightened inmates rushed into the streets, the shooting began; and while the soldiers killed and tormented, the Bashi-Bazouks ransacked each house, igniting it when this work was done. Ah, how merrily they ran to and fro, screaming wildly as the circle of flames grows smaller! What sport to the harassed soldiers to kill slowly and with impunity! 'Tis verily better fun than being dynamited in the hills. They take the sword-bayonets now, for fear of shooting each other, and laugh as the pile of dead grows higher. Into the flames with the infants!—it is good to hear the mothers shriek, and to cut them down as they run blindly at the butchers, armed only with their teeth and nails. Now it is enough, every house is in flames, and not a thing of value left the survivors except what they stand up in, huddled together in a paralyzed group outside. Some have run for the hills, a few of the men have escaped the shower of bullets, but most are dotting the wasted crops."

"We Have Been Driven Mad."

In the *Contemporary Review*, Dr. Dillon quotes the following words spoken to him by Dr. Tatarsheff, the chief of the Inner Revolutionary Committee of Macedonia, in defense of the outrages committed by the revolutionaries :

"It is morally wrong to assassinate the Bashi-

Bazouks. But if a horde of human devils were to set about burning the towns and villages of an Anglo-Saxon people, torturing their inhabitants, violating their women and young children, would your Anglo-Saxons be able to curb their passions and carry out the ethical laws which are now so glibly quoted? There is a wild beast in every human breast, and it has been aroused in ours. The insanity of despair knows no law; Europe has encouraged Turkey to drive us thus insane, and is now shocked at the result. But its fruits may be more terrible still. Our people, goaded to madness at the sight of their sisters, wives, and children bestially tortured to death, have indeed done indefensible deeds, but then they are not masters of themselves. Would the Anglo-Saxons be more self-restrained in our place? It is in accordance with morality for Christendom to connive at, nay, encourage, the Turks to leave the armed insurgents unharmed while doing to death every man, woman, and child in the province, and burning all the villages on the way? The Christian powers are acting thus calmly, deliberately, in cold blood. They have no provocation and feel no remorse. We have been driven mad, and if the system of extirpation be persisted in, there is no enormity from which maddened human nature will recoil."

Dr. Dillon also reports an interview with General Petroff, the Bulgarian prime minister, who repeats what has often been said, that if the powers refuse to interfere Bulgaria will be obliged to take action.

No Hope Under the Turks.

Mr. H. N. Brailsford writes another of his excellent articles in the *Fortnightly Review*. He defends the Macedonians, and declares that their reckless sacrifice of innocent life is in reality the justification of the rebellion. The insurgents have shown themselves ready to sacrifice their own lives in order to throw a bomb, or to murder wholesale in order to attract the attention of Europe. They exhausted every other resource in vain. When Europe assures Turkey a free hand to crush the insurgents, she is authorizing the punishment of men who are demanding nothing more than their legal rights; and when the people of England throw the onus of action on the two Eastern empires, they are repudiating the responsibility which in 1878 they were ready to vindicate even at the risk of war. The situation is of their making.

Bulgaria has been marvelously patient.

"There is not a nation in Europe which would refuse to move if men and women of its own race were being massacred by the thousands just

across its borders. We, who were ready to go to war because our own countrymen were refused the franchise in a neighboring state, have, of all peoples, the least right to criticise Bulgaria. If war results, the burden of criminality will lie not with Bulgaria, but with Europe, which has declined to fulfill a manifest duty."

Mr. Brailsford condemns the *Times*' suggestion that Macedonia should be placed under a Christian governor-general, the Sultan being allowed to appoint the valis. A Christian official who is a subject of the Porte would do no better than a Moslem, and he would exercise no authority whatever over the valis. "There is really no change worth making in Macedonia which stops short of removing the whole civil administration from the control of Yildiz Palace." There must be an European Governor, responsible solely to the powers, and competent to appoint and dismiss his own officials. The concert should act as a whole, not merely through the instrumentality of Austria and Russia. Mr. Brailsford says that an Austro-Russian occupation would mean the end of liberty in the Balkans, and would result in danger to the independence of Servia and Bulgaria.

A New Berlin Conference.

Sir Henry Drummond Wolff contributes to the *Monthly Review* for October a very interesting paper chiefly made up of reminiscences of the stormy days of 1878. His article contains several reports of interviews with Continental statesmen during a tour of private inquiry which he made in that way; and it is curious to notice how universal in those days was the dread of Russian Panslavism, and of Russian predominance in the Greater Bulgaria created by the Treaty of San Stefano. Sir Henry declares that the issue of to-day is much the same as that of 1878, for had the Treaty of Berlin been carried out there would have been no Macedonian question. He attributes the breakdown in Macedonia of the reforms arranged by the European Commission to the fact that after he retired the commission abandoned its old principle that its reports should be unanimous, and the Turks, finding the decision forced on them, did not consider themselves bound. From that day to this no change has been made in the administration of Macedonia, which ought to have received an organization similar to that of eastern Roumelia. Macedonia's needs are similar to those which existed in 1878, and the disorders going on to-day can only be remedied by the provisions of the Berlin Treaty.

This being so, Sir Henry is strongly opposed to leaving everything to Austria and Russia.

"What does this mean? That Austria will obtain possession of Salonika, which is the European port nearest to the Suez Canal, while Russia, by the extension of Bulgaria, will obtain possession of the port of Kavalla, where she may erect a gigantic arsenal, like Biserta, as a menace to Europe, and an additional menace to the Suez route to India.

"Reforms projected by Turkey are perfectly useless, as the Turks are not sufficiently imbued with the spirit of nations aspiring to constitutional existence. If we are merely to follow Austria and Russia, we shall do so to the detriment of all our interests in the Mediterranean and in the further East. The only practical remedy is the reassembling of a conference similar to that held at Berlin. There the political conditions of the European provinces of Turkey must be submitted to the European concert and settled by the seven great powers. Under this conference, commissions must be appointed, similar to that of eastern Roumelia, with the object of providing similar organic statutes."

THE POPE'S INTERNATIONAL POSITION.

A PROPOS of the accession of Pius X., there has been not a little discussion concerning the official relation of the Pope to the various world powers. In this connection the article contributed to the *North American Review* for October by Dr. James G. Whiteley is instructive and suggestive.

"Among the rulers of the earth," says Dr. Whiteley, "the Pope occupies a peculiar position, which is as unique in the realm of international law as the Papacy itself in the realm of religion. In the eyes of international law, the Holy See is not a sovereign state; for the very definition of a state implies the possession of territory, and when the popes were deprived of the temporal sovereignty which they had for centuries exercised over a part of Italy, the Holy See ceased to be a member of the family of nations. The Pope is no longer head of a temporal state, but he is still Sovereign Pontiff, he is still head of that great Church which commands the loyalty of two-fifths of Christendom.

"The position of head of the Church, as Monsieur Bonfils says in his book on international law, is not a local dignity. It is not Italian; it is universal. It has an essentially international character. Infallible legislator in matters of dogma and morals, supreme regulator of ecclesiastical discipline, chief of the hosts of the Church, the Pope, by the very force of circumstances, frequently intervenes in the internal affairs of a number of states. But those nations

of which the population is partly or wholly Catholic cannot allow the Pope to be the subject of any ruler. The Pope should be free and emancipated from subjection to any government whatever. The Sovereign Pontiff cannot be the subject of any state.

"Consequently, although the popes have been deprived of their papal states, although by loss of territory the Supreme Pontiff has ceased to be a reigning sovereign of a temporal state, yet, by the general consent of the powers, he is treated as a sovereign. He has the right to send and to receive diplomatic representatives, and, moreover, at certain courts the apostolic nuncio has precedence over other ambassadors.

"It is not only the so-called Catholic countries which maintain diplomatic relations with the Vatican. Even the Czar of Russia, the official head of the Russian Church, has found it convenient to have a diplomatic representative at the papal court; and stout Protestant dynasties, like those of Holland and of Prussia, have seen the advantage of maintaining diplomatic relations with the head of that Church which numbers so many of their subjects in its communion."

England and the United States, on special occasions, have sent missions to the Vatican, but no permanent embassies are maintained by those countries.

TEMPORAL LIMITS OF THE POPE'S POWER.

"The power of the Holy See over men's souls has been more durable than its power over their bodies. At the present day, the Pope no longer claims the right to direct the temporal affairs of the world. He no longer claims to be Lord Paramount of the kings of the earth in temporal matters. He no longer pretends to depose princes nor to absolve subjects from their allegiance, but he is still one of the most powerful political personages in the world. His loss of territory has necessarily entailed certain changes. He cannot make war, for obvious reasons. Even if he should attempt to make war with his small band of faithful soldiers, it is doubtful whether the powers would regard it as a legal war. He does not enter into treaties as between state and state, but he concludes with governments agreements which are known as concordats. He was also debarred from taking part in the Czar's Peace Conference, on account of the fact that the Holy See is not a temporal state. The loss of the temporal possessions has in some ways, however, added to the dignity and authority of the Pope. His power, relieved from temporal localization, has increased throughout Christendom. His influence touches all countries. For

an illustration, one has but to look at Spain, where for years Carlist agitation has been kept down and the dynasty of Alfonso has been upheld, largely through the influence of the late Pontiff.

"As Monsieur Rivier remarks in his great work on international law: 'If the successor of Gregory and of Innocent is not to-day the monarch of monarchs, the dispenser of crowns, the distributor of continents and oceans, he still personifies the greatest moral force of the world.'"

A PRINCELY CORPS.

SIR HOWARD VINCENT writes in *Pearson's Magazine* on the Imperial Cadet Corps of India:

"The corps is more than a *corps d'élite* to stand before the King. It provides for a real want,—a profession, suitable to their rank, for the princes and nobles of India, who, hitherto, have lived too often in a state of inglorious idleness, under the thumbs of their ministers and advisers.

"The corps is not only intended to give a thorough military education to its cadets, but also such a scholastic and social education as shall fit them to take their places, in time, in the imperial army as British officers and British gentlemen.

"This corps is, perhaps, the most select in existence. It is about thirty strong at present, and numbers five ruling chiefs of Hindustan.

STRICT DISCIPLINE.

"The young princes are kept under very strict discipline. The rules of the corps allow for no laziness or misbehavior of any kind. The viceroy is very careful about the cadet's morals, and any serious offenses are reported to him personally."

The training lasts for two or three years, two terms to a year.

"In the cold weather, the first parade lasts from 8 till 9, and foot drill is the order of the hour. Then comes breakfast, and then, from 10 to 11.30, mounted parade. Lectures and study occupy the time from 12 to 2."

Except that he must attend roll-call at 9.30, the cadet may almost call the rest of the day his own.

The cadets are about equally divided between Hindus and Mohammedans, each having a separate mess. This arrangement has worked very smoothly, the two creeds not clashing.

A GORGEOUS UNIFORM.

Athletic sports are encouraged, and the corps possesses an excellent polo team. The uniform worn by the cadet seems most splendid.

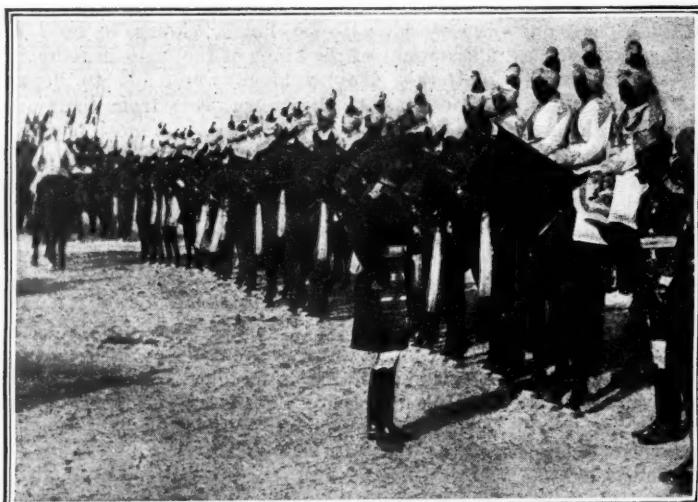
"The full-dress tunic is a long, white, cashmere coat, reaching an inch below the knee, with blue facing and Indian gold embroidery. Gold belts are worn, and a blue and gold turban with a gold ornament, bearing the corps' motto, supported by chains. The gold aigrette on the turban glitters gloriously in the sun,

with wavy effect. The sword has a white scabbard and ivory handle. White breeches and jack-boots complete the uniform.

"The cadets look superb on their black horses,—big Australians, standing close on sixteen hands. The saddlery, adorned with snow leopard skins, complete the picture.

AT A LOW PRICE.

"And this perfect uniform, with an undress kit of light khaki, trimmed with gold filagree, costs but 500 rupees—£35. Indeed, a cadet need only spend £100 altogether on his outfit, including linen and furniture, while he receives a monthly allowance of 200 rupees."



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THE IMPERIAL CADET CORPS OF INDIA.

THE KING AND QUEEN OF ITALY.

A "ROYALTY" article is contributed to *La Revue* for October 1 by Paola Lombroso, once music-mistress of Queen Helena, when still Princess of Montenegro. The writer half apologizes for an article which is certainly a high tribute to both King Victor and Queen Helena, especially to the latter. She is at pains to let us know that she is no fanatical monarchist, but a militant radical, a red-hot socialist; and it is as a socialistic psychologist that she has drawn these two royal portraits.



QUEEN HELENA OF ITALY.

Of Victor Emmanuel III. she says that his careful upbringing has not made him a genius; he has none of the versatility of a certain other more flamboyant monarch; he is not able to express what he has seen and heard, but that does not mean that he is either unobservant or unable to see clearly. On the contrary, he is, if unimaginative, highly cultivated and widely informed, and apt to receive new ideas, and a good judge both of men and things. What has specially endeared him to his people is that he abstains from all parade and pomp. From his court and from his private life all luxury and display are severely banished. He avoids public demonstrations as much as possible, and one of the reasons for his fondness for motoring is said to be that he can thus avoid arriving at railway

stations and being officially received. He does not care for poetry, and has the courage to say so. "It always seems to me like bonbons and sweetmeats for women and children." He is neither musical nor artistic; he has, however, been collecting coins since he was only nine, and his numismatic collection is now really valuable.

As for the Queen, her former music-mistress evidently considers her the more interesting character. She writes with unfeigned admiration of her simple home life in Montenegro, till, at the age of twenty, she became the wife of the Italian heir-apparent. The change from an extremely simple life to that of a queen has in no wise turned her head. Her innate good sense and strong taste for simplicity are always uppermost. What she saw in the court ceremonies and did not find good she quietly changed. Formerly royal receptions took place with enormous pomp from 3 to 6 P.M., all ladies in



KING VICTOR EMMANUEL III.

full court dress. Queen Helena, thinking that her husband and children had first claim on her afternoons, fixed her receptions for 10 A.M.. ladies to appear like herself in walking dress. She likes pretty and becoming clothes, but does not see why she should live to dress. There is a characteristic story of how one of her children, being embarrassed with a multitude of complex toys, the Queen one day picked them all up. "She cannot play with those grand things," she said—"she wants the toys that other children

have." And a lady of honor was at once sent to buy all the cheapest ordinary children's toys that could be found. Of children she is exceedingly fond, and they of her.

THE BRITISH LIBERALS AND THE EDUCATION ACT.

NOW that there is some prospect of the Liberals being restored to power in Great Britain, the opening article in the *Contemporary Review* for October, by Sir George Kekewich, entitled "The Amendment of the Education Act," is likely to attract considerable attention. The education act, begins Sir George Kekewich, is so nakedly unjust that it is certain to be either repealed or amended drastically before educational peace can be reestablished. Sir George recommends the amendment of the act. The county councils, he says, will be unwilling now to part with their new functions. It is not possible to reestablish the school-board system as it existed before the act. The machinery cannot be abolished, and therefore the way to improve it is to give option to the ratepayers in the great centers of population to declare whether they desire to possess an authority directed for educational purposes alone.

As regards the schools, there is, in Sir George Kekewich's opinion, only one remedy. That is to exclude denominational teaching from the schools altogether.

"Of what, then, should the teaching consist? The syllabi (*sic*) adopted by the school boards, as, for instance, those of London and Liverpool, have shown loyal adherence to the spirit, as well as to the letter, of the Cowper Temple clause. They have met with no real antagonism from the Church. For all practical purposes, the instruction under these syllabi (*sic*) has been better and more effective than that in the great majority of denominational schools. The question may well be asked, therefore, why the Cowper Temple clause should not now be applied to all schools, and the local authorities be left as free under it as the school boards were. It must be remembered that, as regards provided schools, they are in the same position already."

The only alternative to this is the complete secularizing of the schools, and of this Sir George Kekewich does not approve. As regards non-Protestant and non-Christian centers, he suggests that power should be given to the local authority to sanction the reservation of certain schools, with the approval of the board of education, for children belonging to a particular non-Protestant or non-Christian church, no religious instruction being given in such schools

during ordinary school hours, but facilities being afforded for denominational instruction in the building outside school hours, not at the public cost. As for London:

"The solution of the London problem appears to be to reestablish a body directly elected by the ratepayers for the control of education, and for that purpose alone, and to place under its supervision all kinds of education."

THE GREATEST SHIPBUILDER IN THE WORLD.

THE Right Hon. W. J. Pirrie, head of the firm of Harland & Wolff, "the most magnificent shipbuilding concern in the world," is interviewed, in the *Young Man*, by Mr. A. S. Moore. He is described as a whole-hearted and patriotic Irishman, now in the thick of developing a new Irish transport scheme. He declares that young men had never better opportunities for building careers than now. He says:

"The battle of life is harder in some respects, owing to the keen competition of the times, but



HON. W. J. PIRRIE.

it must be remembered the days are past when the old advantages of family position and influence availed for a young man's progress. I am happy in thinking that merit is becoming more and more the only determining factor in life, so that to-day the invitation to the youth of the world is, 'Go in and win.'

He advises young men to put as the chief corner-stone of their lives this principle: "Respect your parents' wisdom and good advice."

"At the outset of his career a young man could not do better than resolve that by the help of Divine grace nothing shall enter into his life of which his mother would not approve, or which would have caused her pain."

This advice has been acted on by the man who gives it.

"Mr. Pirrie has great reverence for his beloved mother. One of his most valued possessions,—much more valued than his bank-book,—is the little volume, filled with page after page in her handwriting, that is his inseparable companion over continents and oceans."

Mr. Pirrie is cheery and optimistic as regards the future of commerce. He says international industrial rivalry is a magnificent impetus. "Think," he adds, "how much improvement in our business methods has been accomplished since the Prince of Wales sounded that memorable réveille 'Wake up, England!'"

"Consider the infinite resources of our colonies, millions of acres of almost entirely virginal fields crying for both industrial and agricultural development. We only want our nation to put their heart into their work, as they put it into their sport; there is scope enough for both. Do you think England as a nation can ever be in the rear ranks of commercial progress with such possibilities awaiting our energies? Why, our Ireland itself is ripe for commerce,—so ripe that I should be very sorry to advise one of her young men to try his chances abroad while such glorious prospects remain at his doorstep."

HOSTILE CRITICISM OF EMPEROR WILLIAM.

IN the *Contemporary* for October there is an anonymous article on the German Emperor, which had need to be anonymous if it is written by one of his Majesty's subjects. It is entitled simply "William II.," but is packed full of severe criticism, which shows that the writer has a very poor opinion of the Emperor's ability to play the great part which his vanity impels him to attempt. The chief characteristic of Wilhelm II., says the writer, is his capricious and exuberant impetuosity, which makes his personal actions extremely uncertain and incalculable. In his character and ways he is not a German. The sedateness, frugality, thoroughness, and perseverance which are characteristic of the German mind are entirely lacking in him. He possesses, instead, brilliant imagination, love of display, vivacity, loquacity, capriciousness, and thirst for *gloire*,—qualities which all spring from feminine vanity. He resembles most his great-uncle Frederick William IV., who, according to Benedetti, "was never the same man two days running."

SURROUNDED BY SYCOPANTS.

All this would not matter if the Kaiser were a figurehead. He is anything but that. German

policy is to-day absolutely and completely under the influence of the German Emperor. He is the only motive power in political life, and his decisions are hardly affected by his responsible advisers. But, as the result of his character, he has superseded all the ministries, and surrounded himself by all the ambitious, all the sycophants, all the mischief-makers, and all the intriguers.

"The intrigues between the various sets, composed of high dignitaries, courtiers, and chance acquaintances, which competed for the ear or for the favor of the Emperor, became more and more daring as time went on, and at last brought about more than one grave public scandal, for more than one exposure in the law courts was the outcome of the bitter and relentless war of calumny and defamation which took place between the hostile camps of courtiers and favorites who struggled for influence."

THE EFFECT ON GERMAN POLICY.

Thus Germany's policy has of late become exceedingly frivolous and adventurous, and more and more resembles that of France during the Second Empire, *une politique de pourboire*. In Germany, in the best-informed quarters, it is believed that the course which the Kaiser is steering will inevitably lead to disaster; and the flatterers and time-servers who surround the monarch keep him in a state of delusion as to the true state of the country.

"It is, therefore, but natural that German policy is becoming in an increasing degree visionary, ineffective, adventurous, and unsuccessful; that it experiences repeated failures at home and in every quarter of the world.

THE FRUITS OF INTERFERENCE.

"The Emperor's versatility and many-sidedness are universally known, but though it is humanly impossible that he should have a thorough knowledge of the numerous subjects in which he takes an active interest, he considers himself the highest authority in Germany on foreign and home policy, on military and naval matters, on administration and law, on theology and education, on archaeology and sociology, on painting and architecture, on sculpture and music, on the drama and stage management, and on many other subjects too numerous to be mentioned. Whether it is his boundless confidence in the superiority of his own judgment, or whether it is his opinion that his exalted position should, *ipso facto*, enable him to be the *summus arbiter in omnibus rebus*, seems doubtful. At any rate, it is certain that he considers himself the highest authority in all these matters and many more, and that he strives strenuously to impose,

if not his views, his predilections and his tastes, at least his will, by all means in his power on the experts of the nation and on the nation itself."

The result of his continual interference is that he has made himself thoroughly disliked. He has attempted to treat the city of Berlin as a powerful noble might treat an insignificant village on his estate; and the Berliners, in return, indulge in lively *Schadenfreude* at every failure of his policy. As an example of the Kaiser's domineering disposition, the writer gives the following instance:

"At one time the Emperor wished to have more churches built in Berlin, and after admonishing the local authorities in vain to build more churches, tried to revive an obsolete law dating from the sixteenth century, when Berlin was hardly bigger than Windsor is now, according to which the town was compelled to provide a certain number of churches in proportion to the number of the inhabitants. In attempting to put this old act into practise, it came to a lawsuit with Berlin, which, on the last appeal, was won by the town."

The Kaiser has actually proscribed Hauptmann's plays, while trashy dramas glorifying the Hohenzollerns are given free runs in the state theaters. The following is another instance given by the writer:

"When William II. had inspected the newly-erected building of the Reichstag, and had publicly stigmatized it as the *ne plus ultra* of bad taste, the architects of Berlin gave a great dinner to the designer, at the end of which a huge model of the Reichstag, composed of table delicacies, made its appearance, with the legend written on it, 'The *ne plus ultra* of good taste.'"

THE FOURTH NAPOLEON.

The writer quotes Bismarck's description of Napoleon III. as fitting exactly the present occupant of the German throne, and adds:

"These threatening armaments of Germany, together with the numerous ambitious, if not aggressive, declarations of the Emperor and his chief officials, have led to a new political constellation in Europe which seems to bode the coming isolation of Germany. Besides, the anti-British agitation and Germany's ambitions in South Africa and other parts of the world have been largely responsible for the unification of Great Britain and her colonies, an event which is by no means desired by German statesmen, while the drawing together of Great Britain and the United States can be directly traced to the aggressive anti-Anglo-Saxon world policy of the German Emperor. It is evident that the indis-

cretions of German policy have brought about results which are the reverse of what was expected and intended by their author."

HOW UNCLE SAM FEEDS HIS SAILORS.

IT is the boast of American naval officers that our blue-jackets are the best-paid, best-clothed, and best-cared-for body of sailor men in the world, and the facts brought out in the article contributed to *Gunton's* for October, by Mrs. George M. Stackhouse, entitled "How Uncle Sam Feeds His Sailors," go far to substantiate the claim.

"The navy ration," says the writer, "is, of course, provided for by law, and the daily diet of the enlisted man must conform, in some degree, to this prescribed régime; but infinite is the variety and ample is the dietary realm of Jack the Sailor. As compared with the daily bill of fare of the workingman on shore, the odds are greatly in favor of the sailor. Should he be inclined to grumble at his daily fare, it must be from caprice of appetite, for what laboring man enjoys better and more wholesome food? His food must be well cooked, for no bad cooks are allowed in the navy. Where a cook is incompetent, he is reported, for Jack Tar's stomach must be kept in a healthy condition, if our ships are to be manned with a sturdy lot of sailors. His food must be of the best quality, for it is no secret that Uncle Sam demands the best article in the market, and gets it. The larger ships of the navy now have refrigerating plants of sufficient capacity to carry fresh meat that will ordinarily last from the time of leaving one port till another is reached. In recent years, the means of keeping fresh vegetables at sea for a long time have also been greatly improved, so that fresh provisions are served out at such times and in such quantities as to vary the sea ration. It can no longer be said that the men of the navy, when at sea, are compelled to live entirely on sea food which, as everybody knows, consists of various tinned meats and vegetables.

THE MESSING SYSTEM.

"The messing system on board a big man-of-war is as complex and complete as the table service of a big hotel. The modern war-ship, with its five or six hundred persons on board, must be a floating hotel and storehouse in itself. Every vessel of the navy is required by the regulations governing the navy to have a general messing system. The enlisted men on ship are divided into squads of about twenty each, forming a mess. Chief petty officers and officers'

servants are not included in this division. Every mess has one or two petty officers at its table, who fare like the men. Every mess has its special messman who brings the food from the galley and serves it at the table. It is also the messman's duty to see that the mess-table and mess-gear are clean and in order. The messes on board ship are under the direct supervision of the commissary department, which is under the control of the pay officers."

JACK'S DAILY BILL OF FARE.

It is very evident that the food served to the enlisted men lacks neither in wholesomeness nor in variety.

"The food of the enlisted man on a ship of the United States navy is purchased, cooked, and served entirely at the expense of the Government, the cost being about thirty cents a day for each man. As for variety, nourishment, and a liberal allowance, the list below will show for itself. Three times a day Jack receives a full meal, which may consist of some of the following articles allowed daily to each person: 'One pound and a quarter of salt or smoked meat, with three ounces of dried, or six ounces of canned, fruit, and three gills of beans or peas, or twelve ounces of flour; or one pound of preserved meat, with three ounces of dried or six ounces of canned fruit and twelve ounces of rice, or eight ounces of canned vegetables, or four ounces of desiccated vegetables; together with one pound of biscuit, two ounces of butter, four ounces of sugar, two ounces of coffee or cocoa, or one-half ounce of tea and one ounce of condensed milk or evaporated cream; and a weekly allowance of one-half pound of macaroni, four ounces of cheese, four ounces of tomatoes, one-half pint of vinegar, one-half pint of pickles, one-half pint of molasses, four ounces of salt, one-quarter ounce of pepper, and one-half ounce of dry mustard.'

"These fresh provisions may be substituted whenever practicable: For one and one-quarter pounds of salt or smoked meat or one pound of preserved meat, one and three-quarter pounds of fresh meat; in lieu of the article usually issued with salt, smoked or preserved meat, fresh vegetables of equal value; for one pound of biscuit, one and one-quarter pounds of soft bread or eighteen ounces of flour; for three gills of beans or peas, twelve ounces of flour or rice, or eight ounces of canned vegetables; and for twelve ounces of flour or rice, or eight ounces of canned vegetables, three gills of beans or peas.

"To enlisted men of the engineer and dynamo force, standing watch between 8 o'clock at night and 8 o'clock in the morning, when the ship is

under steam, the following is allowed in addition to their daily ration: One ounce of coffee or cocoa, two ounces of sugar, four ounces of hard bread or its equivalent, and four ounces of preserved meat or its equivalent."

THE BUSINESS SIDE OF CITY SCHOOL ADMINISTRATION.

THE fact that the school system of a city is a business organization is too generally lost sight of by the taxpayers. In New York City the Board of Education handles nearly \$39,000,000 a year, in Chicago more than \$13,000,000, in Philadelphia nearly \$5,000,000, and in lesser cities the expenditure is proportionate. Commenting on these facts in the current number of the *Forum*, Mr. C. B. Gilbert inquires how the affairs of private corporations handling equivalent sums of money in these various cities are administered by their officers. The boards of directors of such corporations, as every one knows, vote on all matters of policy; their function is legislative. The execution of decisions, on the other hand, is left altogether to executive officers, who are responsible for results.

Mr. Gilbert's account of how the details of business are managed for schools is interesting:

"First, there is a board of education corresponding to the board of directors of a private corporation. In very many cities this board is very large, in some cases as large as seventy. It is divided into numerous committees, as many as can be devised, in order, if possible, to give each member a chairmanship. These committees combine, in an indescribable and confusing way, legislative and executive duties. One committee hires all the janitors; another buys all supplies of a certain kind; another supervises high schools; another provides the instruction in German; another provides the instruction in manual training; another decides upon and purchases text-books; another employs teachers; and so on, *ad infinitum*. The men holding positions as chairmen and members of the committees are selected from all walks of life, commonly the lower, and often with absolutely no knowledge of the subjects assigned to their committees. They proceed to pass upon all kinds of subjects, even those requiring expert and technical knowledge, with the wisdom of owls and the fatuity of the ostrich, and then to put their decisions into execution.

"I have heard discussions upon such technical subjects as ventilation and school hygiene by members of a school board who attempted both to legislate and to carry their decisions into execution, which discussions, if exactly

quoted, would make the success of any vaudeville theater. I had once the experience of seeing cooking and sewing put out of the schools of the city in which I was superintendent, because I had unwisely called the subjects 'domestic economy,' and the members of the board did not know what the term meant. It is not uncommon for even respectable, honest, and thoroughly well-meaning people to do the most absurd and injurious things as the result of the methods of organization and administration which put upon them duties for which they are wholly unfit. I have known men to be placed upon committees, with the duty of selecting text-books to be used in schools, who could scarcely write their names, much less intelligently read the text-books submitted. I have known others to be members of committees on courses of study, though they could scarcely distinguish Webster's spelling-book from a Greek alphabet. I have known upon committees charged with the duty of building schoolhouses costing many thousands of dollars men who have never been able to make a respectable living, and could not properly supervise the construction of a hen-coop."

THE IDEAL SCHOOL ADMINISTRATION.

After showing up some of the absurdities of our present systems of school administration, Mr. Gilbert outlines a system such as he would like to see adopted in our great cities, the main points of which are as follows :

"In both the educational and the business departments of school administration there should be executive officers, with powers similar to those of the president of the Steel Company, men selected on account of their particular qualifications for the duties involved and endowed with adequate authority.

"The business side should have, in large cities at least, a business manager.—a man of financial and business training, who should be the general head of all the business. That is, he should let contracts for furnishing supplies and for building schoolhouses ; he should have entire charge of the janitorial force ; he should be able to employ architects and other specialists whenever needed ; he should be responsible for keeping the building in repair ; he should see that the funds of the board are properly cared for ; in short, he should be the business executive.

"On the educational side, the superintendent of schools should be such executive. It goes without saying that the school superintendent should be an educational expert ; that is, he should be a well-educated man in the common

sense, preferably a university graduate. He should have had experience in teaching, and to some extent in supervision. He should be a student of education in both the theoretical and the practical sense. He should be sufficiently a man of affairs to be able to advise the board as to the needs of schoolhouses and school appliances ; he should, in short, be an educational expert. He should hold his office,—without danger of removal, except for serious dereliction,—for a sufficiently long time to be able to demonstrate his organizing ability and the value of his educational notions, and he should be held responsible for the general educational results within the schools. That he may be held so responsible, he should be given the requisite authority. This authority should include the right to appoint all teachers and subordinate officials on the educational side, such as supervisors and principals, subject to the approval of the board of education. He should have the power to suspend and remove all such employees for cause,—which term should include inefficiency as well as insubordination or moral fault,—still subject to the approval of the board and to proper civil-service laws. He should have the power, after proper consultation with his associates, to prepare and administer courses of study and to select text books for use in the schools ; and he should be the final authority in matters relating to methods of instruction, school discipline, gradation, promotion, and the like. The powers and duties of these executive officers should be fixed by law.

"It seems strange that it should be necessary even to present such a statement as this. In a large business concern no other plan would be considered for a moment. Imagine the directors of a railroad attempting, in solemn assembly, to appoint all brakemen ; buy the lubricating oil, and give orders for the printing of tickets ; going personally to Podunk or Painted Post to see whether a plank was needed in the station platform, and then looking around for some political or personal friend to whom could be given the job of putting it in. Imagine them endeavoring to solve the intricacies of a time-sheet, or insisting upon being consulted when it became necessary to sidetrack a freight train. Yet these actions would be scarcely more absurd than the ordinary business and educational management of school boards working through sub-committees.

"The theory underlying the management of most public affairs is wholly different from that underlying the management of private or corporate affairs. That of the latter is that it is necessary to be able to fix responsibility ; that

men in executive positions must be given authority in order that they may be held responsible for results. The theory, apparently, and in many cases certainly, underlying the organization of public business is that it is best to avoid the possibility of fixing responsibility. Many public officials do not like to be held responsible,—naturally, and with evident reason,—and public business is so organized as to enable the guilty or incompetent to escape detection, because no one is responsible."

PROFESSIONAL WOMEN AND THE HOUSING PROBLEM.

IN New York, of all American cities, the housing problem is most acute, and there also special phases of the problem have been developed which in other cities are as yet quite unknown. One of these is the matter of securing suitable accommodations for the 20,000 educated women wage-earners, artists, writers, musicians, teachers and students who go about their daily tasks in the metropolis. An article in the *Arena* for October, by Miss R. H. Knorr, shows what is being attempted by various agencies in the direction of providing homes for the large percentage of these professional women in New York who are without visible family ties. It is clearly brought in this article that until very recently nothing whatever has been done to supply the peculiar needs of this important class on any adequate scale.

"When one considers to what an extent a woman's physical well-being reacts on the efficiency of her work, and furthermore, that home-like surroundings in the hours of rest mean so much to a woman who spends the larger part of her day in office or shop, it is incomprehensible that the awakening social conscience, which is beginning to interest itself in the housing of working people in general, should be so slow to recognize the needs of the unattached women workers. Whatever has been done in this line has been done for the underpaid, in the form of working girls' boarding houses, and so-called 'homes,' generally under religious or charitable auspices. Nor has the business aspect of this phase of the housing question in cities been considered to any extent, for while clubs and apartments abound for men of all ranks, ranging from Mills hotels to the most luxurious 'dens,' apartments adapted to the needs of unattached women, and more especially the great army of women workers, are, with a few notable exceptions, still on paper. The boarding house or the furnished room have so far been the chief agencies in catering to the physical needs of the

majority of unattached women who have neither the time nor the means of making a home for themselves elsewhere. The intolerable gossip of the one and the discomforts and chilling atmosphere of the other are too well known to call for more than passing mention here. But the whole truth has not yet been told, and perhaps never will be, of isolated lives passed amid such cheerless surroundings while battling for the daily bread. The tragedy of the hall bedroom is still unwritten."

THE "BACHELOR GIRL" AND HER CHAFING-DISH.

The widespread revolt from such conditions led to the coöperative flat for "bachelor girls," and this institution has many advantages.

"This colonizing of girls has much in its favor. Coöperation here, as elsewhere, means more for your money's worth. And as the arrangement is understood to be temporary, small hitches are easily overlooked. Less can be said in favor of this departure on a permanent basis, for the result is apt to be disastrous if time reveals serious differences in taste and temperament between the coöoperators. But in those rare cases where two entirely congenial women come together, an ideal union is formed that offers perhaps the final solution of the housing problem for unattached women."

One of the model tenements erected in New York several years ago was set aside for self-supporting women. Forty out of forty-five apartments in this building, of one, two, or three rooms each, with an average rental of ninety-three cents per room per week, are occupied by unattached women, most of whom are bread-winners with moderate salaries, including nurses, teachers, clerks, dressmakers, and literary workers. Good order obtains and the rent is promptly paid by the tenants, without exception.

HOTELS EXCLUSIVELY FOR WOMEN.

Several years ago a corporation was organized, with a capital of four hundred thousand dollars, for the purpose of erecting in the city of New York one or more hotels "for the exclusive accommodation of women, especially of those who either maintain themselves, or are preparing to do so, in artistic, literary, educational, professional, mercantile, and kindred pursuits."

This is a purely business enterprise and promises to yield a fair increase on the investment. The first hotel to be completed by the company was opened in March, 1903, every room for permanent guests having been engaged long in advance. This first building, the "Hotel Martha Washington," is a fire-proof, twelve-story structure, accommodating about five hundred guests.

One hundred rooms are reserved for transient use. There is a restaurant for the general public, a dining-room for the guests, and a dainty tea-room. If the success of this pioneer hotel

zation of irrigated lands has been almost entirely limited to farmers possessing capital.

"This has had several serious disadvantages.

WHAT THE SMALL FARMER CAN DO.

"1. Irrigation lends itself much more readily to the small intensive farm than to the large ranch from which such settlers usually come.

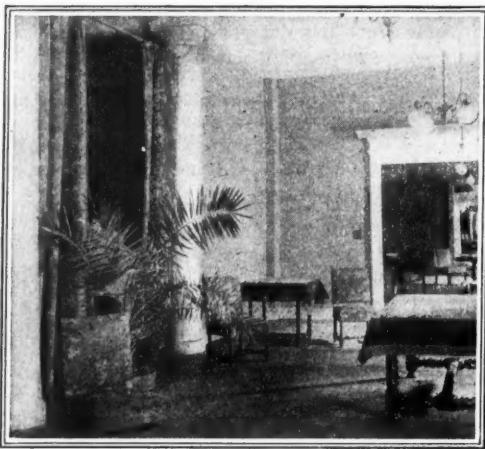
"2. The small farmer, who is not too high-toned to cultivate the land himself, will succeed where the gentleman farmer, who employs hired labor and sends his children to college, will fail, even though the latter may control ten times as much land as the former and possess a few thousand dollars. Give the former a chance, select him with care, and back him with, say, five hundred dollars cash for a start, and he will succeed better than the latter every time. With ample funds for irrigation now in sight, and with some of our brainiest engineers working out extensive plans, what our arid West calls for is not the non-resident gentleman farmer with his staff of cowboys, but the resident twenty-acre, horny-handed son of the soil, who does not consider it beneath his own or his children's dignity to drive the plow, milk the cow, and earn an honest living by his sweat of brain and brow."

RESULTS OF THE SALVATION ARMY EXPERIMENT.

The outcome of the efforts made by the Salvation Army to place worthy settlers on irrigated lands is described as follows:

"Now scientific colonization uses the worthy family that has no cash. It says in brief: 'Place this waste labor upon the waste land by means of waste capital, and thereby convert this trinity of waste into a unity of production.' It has been argued, on the other hand, that, first, they would not go; second, they would not stay; third, they would not work; and last, but by no means least, they would not pay. We set to work, some six years ago, to put our theories into practice, and are now able to say positively, after more than five years' experience, that they have gone and stayed, they have worked and paid. Even the comparatively few failures we have encountered have been a valuable education to us, and we are now in a position to handle the largest schemes with self-sacrificing and expert managers to direct the same, and with a practical code of regulations to guard us from the rocks on which so many similar enterprises have been wrecked.

"Our three colonies are located in Colorado, California, and Ohio, and comprise nearly three thousand acres of land, on which about four hundred men, women, and children have been



INTERIOR VIEW OF THE NEW YORK HOTEL FOR WOMEN, THE "MARTHA WASHINGTON."

warrants the undertaking, the same company proposes to erect others in different parts of New York, adapting each to the varying standards of living and thus eventually providing for all the self-supporting women in the city.

COLONIZATION AND IRRIGATION.

THE success of the Salvation Army in starting colonies of small farmers on the irrigated lands of the West was described in this REVIEW for November, 1902. Commander Booth-Tucker, who was one of the first to discern the possibilities of irrigation for groups of worthy but moneyless settlers, gathered for the most part from our overcrowded cities, delivered an address at the recent Irrigation Congress on "The Relation of Colonization to Irrigation." The keynote of this address, which is printed in the October number of *Forestry and Irrigation*, is its emphasis on the importance of population as a necessary adjunct to the successful development of irrigation schemes. The trouble in the past has been that the settlement of irrigated regions has lagged because of the idea that only men with capital could develop the land.

"The most that the capitalist, or land-owner, or irrigationist has been willing to do in the past has been to bring the water to the land, and accept time payments for the latter from the settler. Further than this they have been unwilling to venture. And hence the coloni-

settled. On the first two colonies every family is entirely self-supporting, and the repayments have amounted to considerably more than \$20,000.

"On the California colony last year the settlers averaged a cash income of \$850 per family, each twenty-acre farm being worth, with its improvements, about \$3,000. The Colorado farms are worth from \$2,000 to \$5,000, according to their location and improvements. On the town site have been established some twenty country stores, most of which are operated by colonists. A commercial club has been formed for the development of the business interests of the settlement. Their turn-over last year amounted to about \$200,000, while the railroad received about \$50,000 for freight from our little country depot.

INCREASE IN LAND VALUES.

"On the California colony a thirty-acre tract has recently been sold for \$4,650, including orchard, farmhouse, and other improvements, being at the rate of \$155 an acre for land which cost us some five years previously \$50 an acre. I mention these facts to prove that we were not over sanguine when we argued that land thus thickly settled would by its own rapid increase in value amply protect the investor against loss. Thus, even supposing that the colonist himself could not or would not pay, the populating of the land would so add to its value that in the course of a few years it could be sold for a sufficient sum to cover the colonist's entire indebtedness and leave him a handsome margin with which to make a new start.

"The further extension of colonization will depend, not on land being available, nor on the ability to secure colonists, but on the supply of capital. That this can be safely invested we think we have sufficiently demonstrated.

"That there is land in abundance admirably suited for colonization no one will deny. We have ourselves under offer two most generous donations of land. In one case 50,000 acres of land, in another 20,000, have been placed at our disposal as a gift; but it would require about \$500,000 in the one case and \$250,000 in the other to establish a suitable colony. With this money we could place about 2,000 settlers (including men, women, and children) upon either tract of land, which would then be worth from \$50 to \$100 per acre. Hence it will be readily seen that the security for a loan of the above amount would be ample, since in the one case the value of the donated land thus settled would be at least two and one-half million dollars, and in the other case not less than one million. There

are also vast stretches of rich irrigable land near our California and Colorado colonies, while the new irrigation projects now on foot will make available immense regions with fertile soil and salubrious climate, suited in every sense to be converted into a veritable poor man's paradise."

DOWIE AND DOWIEISM.

M R. I. K. FRIEDMAN, in the November *Everybody's*, characterizes John Alexander Dowie, who has moved his hosts of Zion upon New York, and tells the story of his rapid rise, of his religious faith, and of his acute business and executive ability.

THE CAREER OF A LEADER.

"John Alexander Dowie was born in Edinburgh; he left Scotland for Adelaide, South Australia, when he was thirteen, and he clerked in that boom town for seven years. If he did anything in those days that brought him into prominence, it has escaped the records; but what he did do was to train himself in business methods (being a Scotchman, he had no more to be forced into it than a duck into water), and to prepare himself for the ministry. To-day he has given such a positive demonstration of his genius for business that no one can doubt his abilities; and one may ask those who charge him with a barefaced and impudent hypocrisy why he left commerce for theology unless his whole nature had a strong leaning toward religion.

"Some few years afterward, Dowie broke loose from the Congregational Church, declaring his intention to make his appeal to the masses at large through evangelical work. Already he had a reputation, and his bizarre eloquence, his rough-and-tumble logic, his strong personality, won him an immediate victory in the field of his choice. His impatience of fettering authority accounts for the change, and he seems only to have been acting in accordance with the dictates of his nature.

"One night, in Melbourne, there swept over his consciousness like an inspiration the full force of the sixteenth chapter of St. Mark, 'He that believeth and is baptized shall be saved. . . . In my name shall they cast out devils. . . . They shall lay hands on the sick, and they shall recover.' His imagination was fired with the idea that he was the prophet foretold by Malachi, and on this inspiration he founded what is supposititiously new in his creed and built the foundation of his really immense fortune. He laid hands on his wife's head, prayed, and cured her of headache, and then, as a wit will have it, he

proceeded to lay hands on everybody and everything else. Those who know Dowie say that from early life he 'had visions,' and that he manifested all those symptoms which the alienist would put under the general head of 'religious hysteria'; if this be so, it would offer a plea for his sincerity, and whether it be so or not, it is known that certain deformities and diseases due to brain lesions have been afforded a temporary relief by sudden nervous exaltation, such as might come from prayer; but on this aspect of the case the limits of this article will not let me dwell.

"THE DIVINE HEALING ASSOCIATION."

"His wife and others cured, and the legions of the faithful increasing by virtue of these proofs of miraculous powers, Dowie at once started to form the Divine Healing Association, which developed later on into the larger organization of the International Divine Healing Association, with John Alexander Dowie, quite as a matter of course, for its president.

"The next step in the career of the prophet was his project to found a great healing center in London, and to spread the faith from there around the world. He traveled on to San Francisco, preaching everywhere along the coast, and reached Chicago by easy stages. It was the year of the World's Fair, which brought its swarms of heterogeneous visitors to the city. It seemed as though the mountains had come to Mohammed, and the canny Scotchman was far from letting the golden opportunity slip. The White City did no more for the fortunes of any man than for John Alexander Dowie's. And while the 'Doctor,' whose énergies run far up in the horse-powers, worked, preached, and cured eighteen hours of the twenty-four, his corps of well-trained missionaries, his deacons, and his disciples were forced to follow at the pace their master set. The printing-office worked overtime to turn out the divine 'Leaves of Healing,' which is Elijah's official organ, devoted to the prophet's doings and his sayings, accounts of his miraculous cures, with the photographs and the testimonials of those cured. No patent medicine has ever been better advertised, to quote the wit that I have quoted before, than 'Dowie's Handy Remedy for all Diseases.'

PROGRESSIVE GROWTH AND PROSPERITY.

Dowie's experiences while a resident of the Woodlawn district of Chicago are then described—the complaints to the authorities against him and his arrests (about one hundred in number) for the alleged violation of municipal ordinances. In spite of all this, he prospered.

"From Woodlawn, Elijah the Second moved his abode northward to Michigan Avenue and Sixteenth Street, rented the commodious St. Paul's Church, then degenerated into the base uses of a storehouse, and from this tabernacle as a center, Dowie's institutions spread on both sides of the boulevard for six blocks. There was the Zion Press, the Zion Bank, Zion College, Zion schools, Zion homes, and the huge Imperial Hotel on Park Row was finally absorbed for a divine hospice of healing. It was Zion Avenue as effectually as if it had been so named.

"The prophet had outgrown the International Association, so he discarded the scaffolding by which he had mounted to the clouds, and with proper flourish of trumpets announced the founding of the Christian Catholic Church of Zion, with himself as the general overseer of everything that appertained to its spiritual, temporal, or financial welfare. He was now the absolute master of all its properties, the sole owner of all of it in fact if not in theory, and he is to-day. The Zion Bank, for instance, is a private institution owned by the overseer, its stock consisting of personal notes signed by Dowie and guaranteeing interest to the holder thereof; and the bank is typical of all the Zion industries from start to finish, from souls, if I may so put it, to shoes. In the overseer's business genius Dowie's flock has just as implicit faith as in his religious prophecies—indeed, religion and business, business and religion, are one and inseparable in Zion.

"Meanwhile St. Paul's Church grew too small for the expanding faith, and one fine day Dowie surprised Chicago by calmly stating that he had rented the monster hall of the Auditorium for his Sunday services. Chicago was still more surprised when the overseer filled the place to overflowing weekly.

ZION CITY.

"However, the overseer of the Christian Catholic Church, with characteristic canniness, recognized that it would be unwise longer to defy a public opinion being intensified against him as the days went on by the more energetic action of the health authorities; and, besides, he was just at the turning-point where he was likely to get the wrong end of free newspaper publicity. So the Zion City Land and Investment was incorporated,—John Alexander at the head of it, to be sure,—and his agents purchased six thousand acres of land, forty-two miles north of Chicago, on the shores of Lake Michigan. The cost of the property is estimated at a million and a quarter, but the overseer raised that on his personal notes without seeming difficulty,

and the whole deal went through with a rush and a quiet that must compel admiration as a bit of up-to-date promoting. It is characteristic of the restorer's business instincts that he proposes to dispose of this land in small lots on long leases for fifteen times its original cost.

"Zion City itself is plain and unassuming enough; its newness and its crudities remind one of the boom towns of our more Western prairies. Instead of the saloons and the dance-halls and the theaters, however, there are the tabernacle and the hospice, for in Zion all worldly amusements are forbidden; and instead of the rougher and more ready Westerner, there are the eight thousand mild-eyed, peaceful, weak-looking followers of the latter-day Messiah. In a word, Zion City may be described as a purely religious town, run on a coöperative basis,—the coöperation ceasing, to the eyes of the vulgar and the uninitiated, when the funds get to John Alexander Dowie. Each member of Zion pays a tithe of his income to the prophet, for Elijah levies no charge for his prayers and his cures, and all offerings must come by the free will of the donors,—a system of finance that has the prosperity of its originator to recommend it to institutions avowedly secular."

COÖPERATIVE STORES IN CALIFORNIA.

THE famous Rochdale experiment in distributive coöperation,—no longer looked upon in England as an experiment,—has been repeated at many points in the United States, but nowhere, perhaps, so successfully as in California, where there are to-day fifty-two local stores organized on the coöperative plan, with a wholesale establishment in San Francisco at the head of the system. In the October number of *Out West*, that representative magazine of the Pacific coast, we find the following account of what is known as the Rochdale movement in California :

"It began seven years ago, at a small village in the San Joaquin Valley, and the start was even humbler than that of the English weavers. The name of the village is Dos Palos. The original capital consisted of \$10 in cash and \$14 in produce. At first, the store was opened only one night in each week, and frequently the entire stock was sold on each occasion. Business and membership rapidly increased. More capital was paid in and the store opened for business twice a week, then three times, then every day. At the end of six months, an inventory showed: Fixtures and building, \$100; merchandise and cash on hand, \$559; total, \$659. At the end of another six months, the capital had grown con-

siderably, and a dividend of \$160 was divided among the stockholders. At the end of thirty months, the cash on hand amounted to \$1,061; merchandise, \$3,756; fixtures and building, \$557.22; bills receivable, \$1,005.60; total, \$6,379.82. The date of this report was January 2, 1899. At this time a new building was constructed, 40 by 60 feet, with a hall above. At the end of that year the capital amounted to \$12,930.25.

"The enterprise was then well established, and has continued to expand ever since. The capital on the first of last January was \$20,000, and the gain in business larger in proportion than the increase in capital.

"Having learned the secret of coöperation, the Dos Palos settlers began to extend it in other directions. In 1902, they added a furniture and undertaking department to their store, and opened a lumber and fuel yard. During the present year, they have started a creamery which handles the product of several hundred cows. They have now determined upon a cold-storage plant and an ice factory, and are also considering plans for a steam laundry.

"Such things must either die quickly or extend in all directions. They simply cannot stand still. It is contrary to the laws of the universe. And at Dos Palos they appear to have taken firm root, and to be likely to extend until all the public-spirited members of the community have come together in an institution through which they will not only buy all they consume, but sell all they produce. Not the least interesting side of such things is the social life growing out of them. It is a business partnership which flowers in brotherhood. Is it not delightful to contemplate what California will be when the Dos Palos example shall have been followed generally and carried to its logical conclusion by a multitude of communities?

THE LOS ANGELES COÖPERATORS.

"An example of another kind is the institution known as the Los Angeles Coöoperators. This was strong to begin with, but gets stronger all the time. It started with a considerable capital, as was to be expected in a community as large as Los Angeles. It does a monthly business of about eight thousand dollars, which is constantly increasing. In addition to the large parent store, it now has two good-sized branches in different parts of the city.

"This company has developed a plan which makes it in effect a mammoth department store. In addition to its large grocery business, conducted in its own stores, it has arrangements with dealers in every line, from the haberdasher

to the agricultural implement man. By throwing the trade of its 1,500 members to the 'associated stores,' it obtains discounts ranging from 5 to 15 per cent. on all they buy. This goes to swell the profits of the co-operative stockholders. It is more than likely that in the end they will have a big department store of their own, under their own roof, with branches in many different parts of the city. This would be nothing but the legitimate growth which is reasonably to be expected. The possibilities in a city as large as Los Angeles are almost unlimited."

A NEW PARASITE.

IN the last number of the periodical issued by the world-famous zoölogical station at Naples, to publish the results obtained by the investigators who come from all countries to study the rich fauna and flora of the Italian coast, appears an account of a new parasite.

The writer, Dr. R. T. Günther, cites such distinguished men as Gegenbaur, von Kölliker, and Heinrich Müller as the true discoverers of the new animal, although it is doubtful whether it ought to be called their discovery, inasmuch as the scientists in question did not know what they had discovered. These scientists had collected from the Mediterranean Sea quantities of a certain fragile mollusk called phyllishöe, a somewhat anomalous shellfish that lacks a shell, and like many of the marine mollusca, is exquisitely beautiful, being transparent and colorless, but thickly dotted over with phosphorescent patches that render it luminous at night.

There was a peculiar structure depending from the lower side of the mollusk, the use of which was not apparent, but which, it was thought, might be some kind of a gland, and might possibly secrete a fluid to attract the unwary within reach of phyllishöe when it desired to eat. Other explanations were offered, but the matter was dismissed without reaching any definite conclusion.

The writer found that phyllishöe sometimes showed no such structure on its ventral side, and after giving the specimens a more careful examination, found it was not a part of the mollusk at all, but a separate organism attached to it, and the organism was one of the jellyfishes.

The jellyfish family presents many different forms, and different species may appear quite dissimilar at first glance, and anatomical study may be necessary to establish the relationship of different kinds. They are among the most delicate creatures that live in the sea, often mere animate films that would collapse into a shape-

less mass if not supported by the buoyancy of the water, but they have great tenacity of life and have persisted for ages against the storms and stresses of the ocean as well as the hostile attacks of other animals. They are phosphorescent, and as many species have the habit of traveling in large companies, they often present the appearance of a submerged bit of the Milky Way as they drift through the water at night. Many kinds possess stinging cells, from which threads like minute harpoons are thrown out against the enemy, producing the effect of an electric shock that may amount to an electrocution; so the initiated, at least, keep at a respectful distance. But parasitism has not been known among them, and it was most unexpected to find this new one attached to the mollusk.

Mnestra is shaped like an open umbrella, with the mouth at the end of the handle and a tentacle floating at the end of each of the four radial canals, which have the same position as the side of an umbrella.

By means of its mouth it attaches itself to phyllishöe just beneath the junction of the oesophagus and stomach, and there it sucks blood and cells from the tissues of its host.

It has stinging cells, but they are on the outside of the umbrella surface, not in a position to be used against the host, although they can be used against an approaching enemy, and the writer notes that they were so used in at least one instance, the mollusk purposely turning its parasitized side toward the intruder. On this account, it may be that the relation between them is of mutual advantage.

This type of jellyfish usually swims by contracting and expanding the top of the umbrella; but the parasite, carried about by its host, has no occasion to swim, still it contracts in the same way, and the writer thinks the contractions aid in drawing blood from the host, and compares the change in the use of the umbrella with an adaptation in the life history of certain crustacea, where appendages originally devised for swimming become converted into organs for mastication.

The writer was puzzled to know how *mnestra* and phyllishöe get together, for even if the jellyfish swims independently when young, it must be a weak swimmer, while phyllishöe is more active, and could escape unless there were many parasites present, and that was not the case.

But the germ cells of many of these animals can creep or swim about, and examination showed that germ cells had penetrated within the body of the host, and were developing there. Between this development inside, and the subsequent attachment outside, of the body of the

host, there is probably a period when the jelly-fish leads a free existence, because small shells of a pelagic organism were found in the stomach of one parasite which must have attached itself only a short time before, for it could not have obtained such food from the body of the host.

BIRDS AS INSECT-CATCHERS.

THE value of our native birds as devourers of noxious insects is too often lost sight of. Those who plead for the protection of the birds base some of their strongest arguments on the services rendered by the feathered tenants of our fields and forests in ridding the farmer of some of his most destructive pests. Such an argument is pressed by Mr. Louis Windmüller in an article contributed by him to the *Outlook* (New York) of October 10. After alluding to the fact that robins have a relish for the poisonous beetle which causes the death of the cow as soon as it enters her stomach, Mr. Windmüller proceeds to enumerate certain other insect-destroyers among our wild birds, as follows :

"The rose-breasted grosbeak, too often shot for its plumage, has a predilection for potato-bugs. Of summer birds none are more beneficial than swallows ; with open beak one of these tiny birds will absorb during its rapid flight all moths and mosquitoes it encounters. Their annoyance will cease wherever swallows congregate. Roosting under eaves, they like to use the clay for the construction of their homes. Of this material moistened piles should be provided convenient to barns and outhouses in springtime. Martins and thrushes also are useful ; the cuckoo will feed on caterpillars so hairy as to be despised by almost all other birds. When the stomachs of cuckoos were opened by Professor Beal in the Bureau of Agriculture, they were lined with the fur of caterpillars. Woodpeckers live on ants.

"The kingbird is by nature a fly-catcher. Contents of the gizzards of 238 meadow larks consisted, 73 per cent. of grasshoppers, etc., and 27 per cent. of vegetable food. The consumption by them and American sparrows of weed-seed is as useful as the destruction of insects ; in either case, birds save the farmer much labor.

* Shrikes are called the butchers of insects because they harpoon living locusts with hooked bills, and preserve what they cannot eat at once for rainy days to come. A catbird will enjoy cherries, but for every single cherry he picks he will consume a thousand worms. All summer birds protect the foliage of elm trees against beetles, insuring a continuance of their cooling shade. Goat-suckers, that formerly had the repu-

tation of taking milk, have been found catching flies that torment cattle. Some harm is done by some birds, but more good than harm is done even by the most obnoxious."

A HOSPITAL AND CRECHE FOR BIRDS.

"**A WOMAN'S Novel Profession**" is the title which Miss Lena Shepstone gives in the *Girls' Realm* to the work of Miss Virginia Pope :

"In the very center and heart of her busy city, she has established a hospital and boarding house for birds. At the time of writing, the hospital contains over six hundred patients and the boarding house some four thousand feathered pets. The latter are sent to the house by their owners while on their holidays. The charge made is from one shilling to half a crown per week, which includes board and lodging and all attendance. The most interesting department of this novel and fascinating institution is the hospital. It comprises several wards,—large, light rooms for the convalescents, and small, darkened compartments for the contagious cases and the patients requiring rest and quietude. About the main wards are arranged the private wards,—airy cages, with lofty perches, and dark boxes with hot-water bottles, mattresses, cotton pillows, and warm flannel coverings."

The medical diagnosis is surprisingly like what is observed with human patients. The bird's tongue is examined ; its digestion and appetite are watched. Pills are given in grapes or mixed with food. In surgical cases, "the birds are usually operated upon without chloroform ;" only in very serious cases is it used. "In nine cases out of ten," according to the bird specialist, "a broken wing or leg can be saved." Miss Pope has taken courses in homœopathy and in allopathy ; she has doctored and cured several thousands of birds. She has sat up all night with a Mexican parrot, originally worth £50, which was dangerously ill. Besides keeping a birds' boarding house and school, Miss Pope trains backward or untidy birds.

STUDIES IN BIRD-SONG.

IT is a charming diversion from the usually solid articles of the *London Quarterly Review* when Mr. Robert McLeod favors us with an essay on the development of bird-song. He reviews two works on the subject by Mr. Charles A. Witchell, who defines bird-song as the whole range of voice in birds. He suggests that the first vocal sounds were cries of terror or anger. To the danger-signal and combat cry is added

the call note. These three strands have been woven into the song of most of our birds.

MIMICRY IN BIRDS.

Imitation is represented as one of the principal sources of musical composition among birds: "The warblers have, as we might expect, much in common in their voices; and the sedge-warbler, a mighty singer, is a gifted mimic. There is practically no limit to the variety of sounds it can reproduce. We have listened to its extraordinary song—a medley of many strains—when twilight was deepening into darkness, and have been entranced. It is impossible to describe it,—rapid, of many tones, of manifold lights and shades, of varied cadences, reproducing with absolute fidelity the songs of neighbor birds, in some cases apparently arranged in a preconcerted order. Buntings imitate pipits; greenfinches and yellow-hammers have similar voices; and we know that in winter they seek their food in the same places, and hear each other's calls. So imitative is the jay in a wild state that it has been known to introduce into its song not only the shrill *whew* of the kite, the scream of the buzzard, and the hooting of the owl, but the bleating of the lamb and the neighing of the horse. A sparrow, we are told, educated under a linnet, hearing by accident a goldfinch sing, developed a song that was a mixture of the songs of these two birds; while another, brought up in a cage of canaries, sang like a canary, only better; a third, reared in a cage close to a skylark, imitated with surprising success the skylark's song, but interrupted the strain with its own call notes. . . . Animal cries, too, have been imitated. The roar of the ostrich and of the lion, it is said, are so similar that even Hottentots are sometimes unable to discriminate between them."

THE NIGHTINGALE'S REPERTORY.

Mr. Witchell is undoubtedly a bold man. He has not feared to attempt a description of the witchery of the nightingale's song. The prose-writer has rushed in where even poets feared to tread; and we are grateful to the reviewer for reproducing the passage which follows:

The fullness of tone which the nightingale displays interferes with the accuracy of imitation in many instances; and, indeed, so wonderful is the song that the listener is apt to forget all else than the supreme impulse and passion of the singer. Perhaps the surroundings of the bird increase the effect. The murmur of the stream; the soft moonlight which bathes the dewy meadow and sheds white waves across the woodland track, checkered with shadows of clustering fresh May leaves,—these are suitable features in the realm of this monarch of song, and increase the effect. Now it pro-

longs its repetitions till the wood rings. Now its note seems as soft as a kiss; now it is a loud shout, perchance a threat (*rrrrrr*); now a soft *peeuu, peeuu*, swelling in an amazing *crescendo*. Now it imitates the *sip sip sip sisisisisi* of the woodwarbler, now the bubbling notes of the nuthatch. The scientific investigator is abashed by this tempestuous song, this wild melody, the triumph-song of Nature herself, piercing beyond the ear, right to the heart. It is pleading now! But no, it is declamatory; now weird, now fierce; triumphant, half merry. One seems to hear it chuckle, mock, and defy almost in the same breath.

WHY BIRDS SING.

The reviewer thinks that the influence of love on the evolution of bird-song has been much exaggerated. In the case of migrants, the male bird sings rapturously *before* the arrival of the female, but "as a matter of fact, it is not till courtship is over, the nest built, and domestic cares begun that the bird utters its full heart. . . . The perfect melody is not that of one who woos, but of one who has won. . . . Song, which in its highest display belongs to the spring of the year, is uttered in the main by the adult male. It is probably a manifestation of vigor and exuberant vitality. It is the overflow of the new life and contagious gladness, which the springtide, with its abundance of food and its bright sunshine, bring to the healthy bird."

THE SCIENTIST SOLVING THE FOOD PROBLEMS.

"IT has been said that mankind is never more than three months removed from abject starvation." From this ancient truism Mr. Ray Stannard Baker, in the November *Harper's*, details some of the numerous ways by which science is supplementing the lessening food supply, and comes quickly to the remarkable experiments of Professor Nobbe, of Forest Academy, Tharandt, in Saxony. He describes Professor Nobbe's work in part as follows:

"In times past investigators of soil and plant culture devoted their attention largely to studying the composition of various kinds of soil, to the improvement of fertilizers, and in suggesting new systems of drainage and water-supply. Professor Nobbe has gone a step further in advance, declaring that plants will grow, under certain conditions, just as well without soil as with soil. At first glance this may seem strange enough, yet here are trees, from eight to ten inches in circumference at the base of the trunk, growing in clean water, without a sign of soil of any description. They stand in rows just back of the Forest Academy, and near Professor Nobbe's greenhouse."

MAKING SOIL ACTIVE BY CHEMICALS.

Tracing many experiments by different scientists up to the point where it was decided that the nodules on plants which grow in soil devoid of nitrogen were the result of bacteria in the soil, Mr. Baker proceeds :

" Professor Nobbe took up the work with vigor. If these nodules were produced by bacteria, then the bacteria must be present in the soil ; and if they were not present, would it not be possible to supply them by artificial means ? In other words, if soil, even worn-out farm soil,—or, indeed, pure sand, like that of the seashore,—could thus be inoculated, as a physician inoculates a guinea-pig with anthrax germs, would not beans and peas planted there form nodules and draw their nourishment from the air ? It was a somewhat startling idea ; but all radically new ideas are startling, and after thinking it over, Professor Nobbe began, in 1888, a series of most remarkable experiments, having as their purpose the discovery of a practical method of soil inoculation. He gathered the nodule-covered roots of beans and peas, dried and crushed them, and made an extract of them in water. Then he prepared a gelatine solution with a little sugar, asparagine, and other materials, and added the nodule extract. In this medium colonies of bacteria at once began to grow—bacteria of many kinds. Professor Nobbe separated the radiocola—which are oblong in shape—and made what is known as a 'clean culture,'—that is, a culture in gelatine consisting of billions of these particular germs and no others. When he had succeeded in producing these clean cultures, he was ready for his actual experiments in growing plants. He took a quantity of pure sand, and in order to be sure that it contained no nitrogen, nor bacteria in any form, he heated it to a high temperature three different times for six hours, thereby completely sterilizing it. This sand he placed in three jars. To each of these he added a small quantity of mineral food,—the required phosphorus, potassium, iron, sulphur, and so on. To the first he supplied no nitrogen at all in any form ; the second he fertilized with saltpeter, which is largely composed of nitrogen in a form in which plants may readily absorb it through their roots ; the third of the jars he inoculated with some of his bacteria culture. Then he planted beans and awaited the results,—as may be imagined, somewhat anxiously. Perfectly pure sterilized water was supplied to each jar in equal amounts. The seeds sprouted, and for a week the young shoots in the three jars were almost identical in appearance. But soon after

that there was a gradual but striking change. The beans in the first jar, having no nitrogen and no inoculation, turned pale and refused to grow, finally dying down completely,—starved for want of nitrogenous food, exactly as a man would starve for the lack of the same kind of nourishment. The beans in the second jar, with the fertilized soil, grew about as they would in the garden, all of the nourishment having been artificially supplied. But the third jar, which had been jealously watched, showed really a miracle of growth. It must be remembered that the soil in this jar was as absolutely free of nitrogen as the soil in the first jar, and yet the beans flourished greatly, and when some of the plants were analyzed they were found to be rich in nitrogen. Nodules had formed on the roots of the beans in the third or inoculated jar only, thereby proving beyond the hope of the experimenter that soil inoculation was a possibility, at least in the laboratory.

" With this favorable beginning, Professor Nobbe went forward with his experiments with renewed vigor. He tried inoculating the soil for peas, lupin, vetch, acacia, robinia, and in every case the roots formed nodules, and although there was absolutely no nitrogen in the soil, the plants invariably flourished.

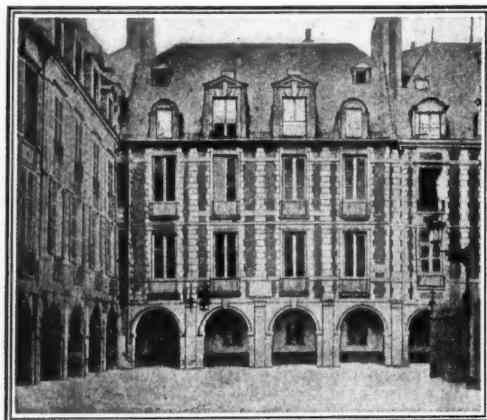
INOCULATING THE SOIL.

" Having thus proved the remarkable efficacy of soil inoculation in his laboratory and greenhouses, where I saw great numbers of experiments still going forward, Professor Nobbe set himself to make his discoveries of practical value. He gave to his bacteria cultures the name 'Nitragen'—spelled with an a—and he produced separate cultures for each of the important crops —peas, beans, vetch, lupin, and clover. In 1894, the first of these were placed on the market, and they had a considerable sale, although such a radical innovation as this, so far out of the ordinary run of agricultural operation, and so almost unbelievably wonderful, cannot be expected to spread very rapidly. The cultures are now manufactured at one of the great commercial chemical laboratories on the river Main. I saw some of them in Professor Nobbe's laboratory. They were put up in small glass bottles, each marked with the name of the crop for which it is especially adapted. The bottle was partly filled with the yellow gelatinous substance in which the bacteria grow. On the surface of this there was a mossylike gray growth, resembling mould. This consisted of innumerable millions of the little oblong bacteria. A bottle cost about fifty cents, and contained enough bacteria for inoculating half an acre of land. It must be

used within a certain number of weeks after it is obtained, while it is still fresh. The method of application is very simple. The contents of the bottle are diluted with warm water. Then the seeds of the beans, clover, or peas, which have previously been mixed with a little soil, are treated with this solution and thoroughly mixed with the soil. After that the mass is partially dried so that the seeds may be readily sown. The bacteria at once begin to propagate in the soil, which is their natural home, and by the time the beans or peas have put out roots they are present in vast numbers, and ready to begin the active work of forming nodules. It is not known exactly how the bacteria absorb the free nitrogen from the air, but they do it successfully, and that is the main thing. Many German agriculturists have tried Nitrogen. One, who was skeptical of its virtues wrote to Professor Nobbe that he sowed the bacteria-inoculated seeds in the form of a huge letter N in the midst of his field, planting the rest in the ordinary way. Before a month had passed, that N showed up green and big over all the field, the plants composing it thriving so much better than those around it."

THE HOUSE OF VICTOR HUGO.

TIBURCE BEAUGEARD describes in the *English Illustrated* "La Maison de Victor Hugo," now the property of the city of Paris and a public museum. Its contents bear witness to the versatility of the great writer. There is a desk carved by the great poet himself, originally intended for a charity bazaar, but kept by the poet's wife, who sent a thousand-franc note instead. On this desk are the inkstands of A.



THE HOUSE IN THE PLACE DES VOSGES, PARIS, OCCUPIED BY VICTOR HUGO FROM 1833 TO 1848.

Dumas, Lamartine, George Sand, and Victor Hugo, mounted on one stand by Hugo himself. The rooms on the second floor contain specimens of the poet's efforts in drawing, painting, woodcarving, and even tapestry. "He paints as he writes, with the eyes and imagination of an intellectual giant." Théophile Gautier is quoted as saying, "Had Victor Hugo not been a poet, he would have been a painter of the first order." His painting materials comprised pen, pencil, red chalk, charcoal, and soot. The prevailing note of the poet's redecoration of the house is described as Oriental and medieval. A grotesque example of woodcarving by Hugo is pictured. The singular fact is recorded that Hugo disliked music; and would never allow a piano to be brought into the house. At one of his receptions, however, a number of young girls sang some choruses, and one of these singers sang some choruses, and one of these singers was afterward Empress of the French.

WOMEN AS MATHEMATICIANS.

THE leading article in the *Revue Scientifique* of September 26 is interesting and eminently readable. M. Gino Loria treats of female mathematicians. It is not simply a series of biographies, but is an attempt, more or less serious, to answer the question as to whether women as mathematicians are really great and capable of being leaders.

"Hypatia offers one of the most brilliant, and perhaps the most ancient, of the human documents to solve the question, to know if in the realm of science the woman can perchance attain the high summits; if in a woman's body lodges one of those great souls destined to speak to humanity through the centuries; if, therefore, it is wise to encourage or, on the other hand, to restrain the tendency,—a tendency more and more accentuated among the beautiful half of the human race, to enroll themselves as solitaires in the search for truth, with the secret hope of obtaining the marshal's baton."

Hypatia he considers, perhaps, the most noteworthy of all the woman mathematicians. Emilie de Chatelet, the friend of Voltaire, he dismisses as hardly worthy of serious consideration, for she used science largely as a mask for her follies. Maria Gaetana Agnesi was of a higher type, but she showed a lack of real love for the subject, for in her later life she gave up her study and devoted herself to religion and charity.

Caroline Herschel worked side by side with her brother, carried out the most abstruse calculations with great skill, and showed herself abundantly capable of independent work. But after the death of her brother she abruptly aban-

doned her mathematical work, although she lived twenty-seven years longer.

Like Caroline Herschel, Thérèse and Madeleine Manfredi assisted their brother in his work, while the wives of Lalande, Flammarion, Huggins, Piazzi Smith, and Villarceau assisted their husbands. Maria Mitchell and Jane Taylor are mentioned among the distinguished women.

Sophie Germain, who as a young girl was inspired by the story of the devotion of Archimedes to study, became one of the most distinguished of the women mathematicians. M. Loria says that while mathematicians may hesitate to receive her into the inner circle, philosophers do not hesitate to class her with the precursors of Comte.

Of all the women mathematicians of modern times, perhaps, Sophie Kovalevski takes the highest rank. The daughter of a professor, married in order to secure freedom for study, she was matriculated in Heidelberg, and afterward removed to Berlin. In the latter city she became the favorite pupil of Weierstrass. She received a doctorate at Göttingen, and later became a professor in the University of Stockholm.

M. Loria points out that in almost all the cases cited the women did not pursue the study as an end in itself, and in most cases were more or less dependent upon men. Even Hypatia was guided by her father, and perhaps took up the study as much through filial devotion as for any other reason. Emilie Chatelet was under the influence of Voltaire, Clairant, and Maupertius.

Maria Gaetana Agnesi was assisted by Rampinelli and Ricaati. Sophie Germain was aided by Gauss, Legendre, and Poisson, while Caroline Herschel's work was to assist her brother. It is even a question whether the success of Sophie Kovalevski was not largely due to association with Weierstrass. She, too, hardly pursued mathematics as an end, for she was dissatisfied and *sans joie et sans enthousiasme*.

In conclusion he says: "I have followed the development of the flower which seemed to indicate in some women latent faculties of surpassing power, but the examination of the harvested fruits does not bring me to the certainty that these women can have access to all paths; on the contrary, there has sprung up in my heart the conviction that they ought to consider mathematics with the devotion and admiration of a devotee who approaches an inaccessible height. Although, in a general way, I am disposed by inclination and by conviction to open the doors of the sanctuary of the exact sciences to whoever wishes to leap upon the threshold, I find myself with regret obliged to make reservations in regard to those whom Nature seems

to have called to other destinies. Perchance some archaeologist of the future, comparing my reservations with the progress in mathematics by women of the coming centuries, will find good arguments for accusing me of having been a man of little faith and a false prophet. My bones, bleaching in the sepulcher, will quiver with joy at this new triumph of the 'eternal woman.'"

ENGLAND'S NATIONAL SCENIC TRUST.

THE work of the organization formed in England to save the beauties of the country from the hands of the vandals is described in *Pearson's Magazine* for October by Mr. Nigel Bond. "The National Trust for Places of Historic Interest or Natural Beauty" was organized in 1895, in order that ancient buildings or monuments, which speak of past history, and spots of great natural beauty should be preserved to the nation.

The late Duke of Westminster was its active president on its foundation, and on the council many eminent Englishmen are proud to serve.

"The members of the trust are forbidden to take dividends from its receipts, and all profits are spent in furthering its objects; moreover, the constitution of the council, in which the chief learned societies and such bodies as the universities and the trustees of the National Gallery are directly represented, is a guarantee that the property acquired will be treated in the best way.

"As by its ownership of old buildings the trust endeavors to rescue from decay and destruction examples of man's handiwork, so by its 'open space' interests it attempts to preserve the natural features of beautiful England."

Beautiful scenery is preserved, and old houses are repaired and saved from demolition. Monuments are erected to great men, such as Nelson and Hardy. No part of the kingdom has not received benefit from the National Trust. In most foreign countries the state preserves historic monuments and relics, and preserves natural scenery, but in England this work has fallen into the hands of the National Trust.

"The largest and most enchanting of the properties of the trust is Brantlehow. It consists of one hundred and eight acres, and is about a mile and a half in length, bordering on Derwentwater, 'the Queen of the Lakes,' and stretching from the water's edge up the fell side of Catbells.

"Over £7,000 was raised two years ago for its purchase and maintenance. Donations, made by rich and poor alike, varied in amount from £500 to one shilling, and the list of 1,300 sub-

scribers was in a real sense representative of the nation as a whole.

"Those who are acquainted with the unsurpassed loveliness of the lake country will rejoice that this acquisition has been made."

NEW MEXICO'S GYPSUM DESERT.

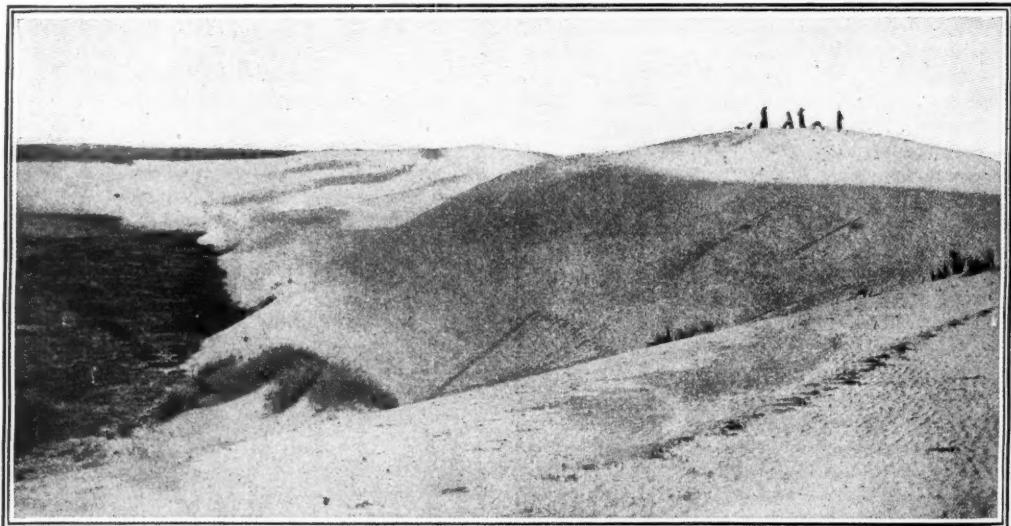
IT is safe to say that comparatively few travelers have ever visited the great desert of white gypsum lying twenty miles from the railroad station of Alamogordo, New Mexico. Writing in *Out West* for October, Mr. E. Dana Johnson describes these "White Sands" as one of the strangest and most beautiful of all the natural wonders of the Southwest.

From a distance the gypsum appears as a "huge splotch of glistening snow upon the vast expanse of gray-brown desert." A close view makes this resemblance to snow all the more startling. For quite a distance, as one looks from a high point out over the leagues of gypsum, it is a spotless, snowy waste. Farther away, stretches of scanty, whitened vegetation, desolate alkali flats, and dried-up lakes alternate with wide banks of solid white gypsum. It is as if the plain had been covered with very many feet of snow, after which a high wind had swept over it, laying the ground bare here and there and piling up huge drifts yonder. The great billows of white, stretching away to the mountains in the sunshine, the silence and the quiv-

ering haze, make a sight never to be forgotten. Vast, dazzling, and mysterious, the Great Desert lies, set in the midst of the greater solitude of the dreamy plains, like a huge glittering jewel. The long serrated outline of the San Andreas range rises darkly against the sky to the west, while the sharp, jagged summits of the Organs stand out boldly athwart the southern sky. To the northeast gleams the lofty, hoary summit of Sierra Blanca, while nearer, to the east, the Sacramentos quiver in the purple distance.

"For a depth of a few inches the gypsum dust is perfectly dry, and climbing one of the little hills is like ascending a mound of fine white sugar, into which the feet sink over the shoe-tops. As a matter of fact, this curious white powder, when dry, is nothing in the world but pure plaster of Paris. Underneath, it is moist and cohesive, and will pack into a ball in the hands like snow. The dryness of the surface is caused, of course, by its exposure to the air; but the sand, if sand it may properly be called, is so heavy that the wind blows it about very little, and the dunes change in contour only slightly.

"The gypsum desert is nearly thirty miles long and averages ten miles wide. There are seventy thousand acres of white sand-hills besides the innumerable alkali marshes and lake-beds within the borders of the White Sands, as the deposit is called by the people of New Mexico."



THE WHITE GYPSUM DESERT OF NEW MEXICO.

THE PERIODICALS REVIEWED.

THE CENTURY MAGAZINE.

EDMUND CLARENCE STEDMAN'S article, in the November *Century* on "Life on the Floor" is an exceedingly human picture of the New York Stock Exchange, by a man who adds to the Wall Street knowledge and experience years of the grace of good writing. The different kinds of brokers, their organization, their activities, their character, and their surroundings, the ways they do business in time of success and failure, their humor and their tragedies make up a vital comment on modern finance.

"The floor operators," says Mr. Stedman, "are Fortune's knights-errant, not her slaves, and the floor is their tilting-ground. For endurance, dash, quickness of judgment and action, they have not their peers. It is easy for the cadet of a rich banking house to execute orders, but force him to become a free-lance, and he might starve. The born-and-bred room-trader may be reduced to his last hundred, and yet there is always hope; he will bide his time, and, with caution and the amazing chances of the market, is almost sure to come up again. His 'seat' and his brain are the best kind of reserve capital, and at the worst there is always a luckier comrade to start him with a fresh stake."

"The different classes of brokers are alike in one respect: they must think and act more quickly than other men; deliberation is useless to them. This, with the habit of taking a man at his word, makes them resent palaver, and sometimes places them at a disadvantage in business dealings with outsiders and when off their own ground."

The first installment of some unpublished letters written by Thackeray to the family of the late Mr. George Baxter, of New York, during the author's visit to America, appear also in this number. They are accompanied by amusing sketches and reproductions of the script. Mr. A. Addington Bruce tells the story of a dramatic adventure which the workers, "the sand hogs," underwent in driving the Hudson River Tunnel, and explains many of the engineering problems the solution of which makes such a tunnel possible.

THE PRESENT EPIDEMIC OF CRIME.

Dr. J. M. Buckley furnishes some startling statistics about the character of present-day criminals.

"About three years ago," he says, "I delivered an address to the prisoners in the penal institution at Sing Sing. In the audience of 800 were 2 bankers, 30 bookkeepers, 47 clerks, 4 physicians, 5 lawyers, 1 United States consul, and 21 salesmen. Besides, there were policemen, chemists, dentists, 9 merchants, 2 journalists, an architect, and 2 clergymen. The balance of the 1,250 in the prison, 450 of whom were in attendance at the Catholic chapel, included all trades and occupations. Prominent representatives of almost every denomination were there, and several members of families of high ancestral distinction in the country. In addition to these were many skilled workmen. After a similar address in the Tombs Prison in New York, I visited the prisoners from cell to cell. Among them were fourteen charged with murder. Of these, ten would compare favorably in appearance and manner with the

male attendants at any religious service. It is not so surprising that more than a third of the inmates of the Elmira Reformatory are well educated, and many of them refined and ingratiating in conversation and deportment. The alarming fact is that a large proportion of these are among the most incorrigible."

Among other causes for disrespect of law, Dr. Buckley takes labor unions to task, and says that the recent coal strikes still further weakened regard for order. Speaking of President Roosevelt's intervention, and considering it detrimental in its results, he quotes Washington's fundamental maxim: "Influence is not government."

HARPER'S MONTHLY.

DR. SIMON NEWCOMB foresees, in the November *Harper's*, some of the "Problems of the Universe" which the twentieth century has to solve. The minute corpuscles which exist around the millions of atoms which, for example, make up a drop of water; the slight change of the magnetic needle; the mystery "of the so-called new stars which blaze forth from time to time," the causes of these outbursts; the possible solution of earth problems from these and other phenomena; the things that M. Curie's radium suggests,—are some of the things concerning which Dr. Newcomb writes.

DIGGING UP THE HISTORY OF EGYPT.

The historical and archæological value of the Ten Temples of Abydos is described by Dr. W. M. Flinders Petrie. By recent discoveries "history" is laid out before us in state," to use Dr. Petrie's words, "dating from the beginning of the Kingdom of Egypt, 4700 B.C., and ending with almost the last of its native kings, 370 B.C. Perhaps the most notable discovery recorded is the little ivory image of Cheops (Khufu). Dr. Petrie also explains how the exhaustive investigations have been carried on.

Prof. Brander Matthews quotes striking epigrams from American poets, many from little-known writers, and many more from Lowell, Longfellow, Holmes, and T. B. Aldrich.

CHAMPLAIN, THE PIONEER.

An interesting study of Champlain, by Henry Loomis Nelson, the first of a series of studies of early American pioneers, sums up his characters succinctly: "Notwithstanding his failure, Champlain is one of the noblest characters of early American history. He was one of the great navigators of a time when a voyage across the Atlantic was taken at the risk of life. He was a persevering and patient worker, a keen judge of men, and a careful and accurate observer. He was an excellent man of business. He was enthusiastic and inspiring, and had wonderful self-control. He was devout and religious, but long experience bred in him a philosophical indifference to theological disputes. He had no vanity, and was unselfish and self-sacrificing. He was humane. He was possessed of the mysticism and superstition of his time; not so deeply, however, that he could not meet with conquering ridicule the

deeper mysticism and the more childish superstitions of his savage friends. He was not only a good and courageous navigator, but he was a brave and skillful soldier. Above all, he not only inspired men with his enthusiasm, but invited their confidence, from the king, nobles, and merchants of France to the savages of the woods. In some degree, even as it was then given to Frenchmen to understand the art of politics, he was a statesman; he could settle disputes justly and satisfactorily, and he could administer the affairs of the community under his charge with the requisite skill. Moreover, he had a plan for the adoption of the colony by the king."

Quotation is made from Mr. Baker's article on "The Scientist and the Food Problem" in "Leading Articles of the Month." Miss Mary Johnston's new novel, "Sir Mortimer," begins in this number.

SCRIBNER'S MAGAZINE.

ERNEST C. PEIXOTTO, in the November *Scribner's*, takes the reader on a rambling journey through "Bret Harte's Country," and accompanies the text with characteristic drawings and sketches. Andrew J. Stone, whose explorations of Arctic America have been notable, describes the methods of overcoming hardships in camping in the far North, and tells of a number of personal adventures. One camping experience at Cape Brown, Mr. Stone describes as follows:

"I awoke the following morning almost suffocated. The tent had blown down on top of us and the snow was drifting hard upon top of that, and a storm was raging with a fury beyond description. Arousing my companions, we managed, with difficulty, to get out of our bags and from beneath the heavy mass of snow and canvas. The wind struck us with a force that made it difficult for us to stand, the atmosphere was so full of flying snow that we could scarcely see, and the roar of the storm was so great that we could not hear each other speak.

"The only sign I could find of my sled-dogs would be when I would stumble over a mound of snow and discover there was a dog inside of it. At such a time a practical knowledge of how to do things saves many a life. The snow of these regions is always hard, packed by the winds, and we set to work with axes cutting and carrying huge blocks of it and building walls with them around our camp. For three hours we worked with all our might, building heavy walls on three sides until they were almost as high as our heads. Then we cleaned the snow off of the top of the tent and once more erected that and made it fast."

THE SENATE.

Senator Henry Cabot Lodge's essay on the powers and privileges of "The Senate" gather together in compact shape a large mass of well-known material and presents it concisely and clearly. "The Senate," says Senator Lodge, in summing up, "is to-day the most powerful single chamber in any legislative body in the world, but this power, which is shown daily by the wide attention to all that is said and done in the Senate of the United States, is not the product of selfish and cunning usurpations on the part of an ambitious body. It is due to the original constitution of the Senate, to the fact that the Senate represents States, to the powers conferred upon it at the outset by the makers of the Constitution, to its permanency of

organization, and to the combination of legislative, executive, and judicial functions, which set it apart from all other legislative bodies. Without the assent of the Senate no bill can become law, no office can be filled, no treaty ratified."

Royal Cortessay writes an appreciation of John S. Sargent, and Prof. Brander Matthews estimates "The Literary Merit of Our Latter Day Drama."

MCCLURE'S MAGAZINE.

M R. CLEVELAND MOFFETT'S article on the "Wonders of Radium," and Mr. Roy Stannard Baker's estimate of "The Labor Boss—the Trusts' New Tool," in the November *McClure's*, are quoted among the "Leading Articles of the Month."

NEW YORK UNDER TAMMANY AGAIN?

Mr. Lincoln Steffens' study of American municipal government reaches New York this month, at an opportune time. Mr. Steffens characterizes Mr. Low as honest, intelligent, and conscientious, but unamiable, unlovable, cold, impersonal, and unpopular, a "bourgeois reformer." He considers that New York's idea of government as non-partisan business is on trial, and he fears the result. Mr. Steffens then gives a clear-cut description of Tammany government or mis-government.

"Tammany's democratic corruption," he says, "rests upon the corruption of the people, the plain people, and there lies its great significance; its grafting system is one in which more individuals share than any I have studied. The people themselves get very little; they come cheap, but they are interested. Divided into districts, the organization subdivides them into precincts or neighborhoods, and their sovereign power, in the form of votes, is bought up by kindness and petty privileges. They are forced to a surrender when necessary by intimidation, but the leader and his captains have their hold because they take care of their own. They speak pleasant words, smile friendly smiles, notice the baby, give picnics up the river or the sound, or a slap on the back; find jobs, most of them at the city's expense, but they have also news-stands, peddling privileges, railroad and other business places to dispense; they permit violations of the law, and if a man has broken the law without permission, see him through the court. Though a blow in the face is as readily given as a shake of the hand, Tammany kindness is real kindness, and will go far, remember long, and take infinite trouble for a friend."

Speaking further of the amount of organized graft Tammany can control in New York, he makes this striking statement: "If Tammany could be incorporated, and all its earnings, both legitimate and illegitimate, gathered up and paid over in dividends, the stockholders would get more than the New York Central bond and stockholders, more than the Standard Oil stockholders, and the controlling clique would wield a power equal to that of the United States Steel Company. Tammany, when in control of New York, takes out of the city unbelievable millions of dollars a year."

But Tammany's methods are provincial compared with those of the Philadelphia ring. The dangerous time ahead for New York is when Tammany ostensibly reforms.

In a long editorial announcement of the second part of Miss Tarbell's notable "History of the Standard Oil Company" is summed up the great reason for Mr.

Rockefeller's early success, the combination of railroads, and the secret grant by which he obtained not only rates "far lower than others could get, but which gave him *drawbacks on the shipments of the people*." This is characterized as "a piece of brigandage as outrageous as was ever organized by Cartouche himself." The fiction in *McClure's*, as usual, is typically American and of the commercial in character.

THE COSMOPOLITAN.

MR. P. T. MCGRATH contributes in the leading article in the November *Cosmopolitan* a series of stories of dramatic "Adventures on Ice Floes Off Newfoundland." Mr. Fritz Morris characterizes "The Turk as a Soldier," describing the training of the Sultan's troops, the work of the military academies, the military duty of citizens, the organization of the war and ordnance departments, etc. "In case of war," he says, "the Sultan could put into the field with the active army, or nizam, 320 battalions of infantry, 203 squadrons of cavalry, 248 batteries of artillery, 48 companies of engineers, 4 full companies of the telegraph service, and 21 companies of the train. In addition to this, he could mobilize the redif, or army of the reserve, consisting of 374 battalions of infantry, with a further reserve of 666 battalions of infantry, 48 squadrons of cavalry, and 266 squadrons of irregular mounted troops. Taken as a whole, the Turkish army, on a war footing, would consist of 19 or 20 army corps of from 40,000 to 50,000 men each, with a total of from 800,000 to 1,000,000 men under arms."

The "captains of industry" whose careers and characters are sketched this month are Sir William van Horne and Matthew C. D. Borden.

THE PROGRESS OF JAPAN.

Taking the World's Fair at Osaka as an instance, Count Hirokichi Mutsu sums up "The Wonderful Progress of Japan," her remarkable receptivity of foreign ideas, and her quick inventiveness to improve upon them. He quotes from Mr. S. S. Lyon, the United States consul at Kobe, concerning the Machinery Building at Osaka. "When one considers that but some thirty years ago not only was there no such institution as a factory in Japan, but that iron foundries and mechanics' workshops as now understood were unknown, while engineering was an alien art, the display beneath the roof of the Machinery Building is little short of marvelous."

"Motors and engines of all descriptions," adds Count Mutsu, "silk-weaving and dyeing machines, tea-refining and rice-cleaning machines, cigarette-making and soap-making appliances, are among the exhibits, many of them being in working order. The fact that the exhibits in this section have increased by several thousands since the Exposition of 1895 shows what an advance has been made in this line of industry during the intervening eight years."

MUNSEY'S MAGAZINE.

THE "Land of Feuds" is the subject of an article in November *Munsey's* by Hartley Davis and Clifford Smith, in which is told the terrible story of the seven great Kentucky feuds and the paradoxical characters of the men who have carried them on. These seven feuds have resulted in some two hundred and fifty

murders, and only two men have suffered the death penalty in retribution. The golfing season of 1903 is reviewed by J. F. Marsten, with particular reference to Champion Travis, and to the question of the game's continued popularity. Mr. Fritz Morris, writing of the "Foremost Jews of To-day," shows by a study of personalities how dominant many Jews have become in many lands and in many kinds of work.

EVERYBODY'S MAGAZINE.

A SELECTION from Mr. Friedman's article on John Alexander Dowie in November *Everybody's* appears among the "Leading Articles of the Month." Mr. Alfred Hodder, who is Mr. Jerome's private secretary, in a study of the reform administration in New York, shows that the most important acts of municipal government are usually unseen and unheard of, and gives instances of particularly efficient things that have been done quietly by those at present in office. He cites each department to prove one of his opening statements that "the really great and praiseworthy good that the present administration has done is of an inconspicuous kind, as the really great and blameworthy harm that the previous administration did was of an inconspicuous kind."

SUCCESS WITHOUT WEALTH.

Francis Bellamy, starting from the modern creed, "Brains may be more important than money, but nowadays the best way to convince the world that you have brains is to make money," proceeds to outline the careers of "Successful Men Who Are Not Rich." "If people in general have apparently scuttled over to the new bigotry, that the only success worth winning is the getting of money, there are still plenty of men, of vigorous mind, who have a saner view of life and happiness." Eugene Wood's amusing essay on "The Good Bacteria" contains interesting facts about microbes new and old. There are some striking pictures of Old World handicrafts, and an unusual amount of bright fiction.

THE WORLD'S WORK.

MR. HENRY THOMPSON, in the *World's Work* for November, furnishes an interesting sketch of the personality of the Sultan of Turkey. Abdul Hamid II. is, according to Mr. Thompson, a modern Dr. Jekyll and Mr. Hyde, extraordinarily generous and courteous, a splendid executive who has built up education, the army, and the general *esprit de corps* of the population remarkably, and who is respected by his followers; and, also, a religious fanatic, a murderer of both his own subjects and those of other nations, and a liar beyond belief.

THE GROWTH OF LABOR UNIONS.

The rapid rise of labor unionism in America is traced by W. Z. Ripley, professor of economics at Harvard. While English unions have increased, in nine years, from 1,500,000 to 1,900,000, those of the United States have grown from 900,000 to 2,000,000. The causes for this growth have been, in the main; prosperity, the trust or combination idea, the coal strike, and the labor movement's natural growth. The future of unions will depend, Professor Ripley thinks, on the continued prosperity of the country and on the administration of the unions.

RUSSIA CONSTANTLY EXPANDING.

The acquisitions by Russia in half a century of a larger area than the United States and her consistent policy of extension make the various methods used, as described by C. W. Barnaby, interesting.

"Privileges are obtained for her merchants and caravans to pass into or through the coveted country for trade; to open stores and banks; to trade at ports and navigate rivers; to establish post routes, with their various stations for exchange of drivers and horses; and to install consuls at various places. Concessions are secured for cutting timber, or operating mines on certain tracts of land, and rights are procured whereby Russia and her subjects may buy land and build consulates, stores, and factories, and also dwellings for those who are connected with the various enterprises. Rights are also obtained, or taken, to protect consulates and other Russian property, and to protect the Christian subjects of an unchristian government. Army reconnoitering expeditions are sent into the country with goods, disguised as merchants, or accompanied by a detachment of Cossacks, and claiming to be purely scientific expeditions. Out of pure generosity and solicitude for the welfare of her neighbors, she engages to watch over the conduct of Russian merchants located within their gates, and 'permits' the prospective victims to employ Russian officers to re-organize their armies, and lends them money."

Prof. T. N. Carver, of Harvard, took a 1,000-mile horseback ride through the corn-belt last summer, and tells of the modern methods of farming, the importance of the moderate-sized farm, and the various uses to which the crop is put. Mr. C. H. Caffin gives a critical estimate of the portrait painting of John S. Sargent, and I. F. Marcosson characterizes the "Country Merchant Come to Town." Mr. Cunniff's article on "The Post Office and the People" is quoted elsewhere in this number.

THE ATLANTIC MONTHLY.

THE English tariff crisis and the dominant personality and position of Mr. Chamberlain give Mr. Brooks Adams, writing in the October *Atlantic*, an opportunity to trace, in a scholarly article which he calls "Economic Conditions for Future Defense," some economic development in Europe and America. The article is largely historical, and its text, as applicable to the United States, may be stated in Mr. Adams' words:

"As the economic system, of which the Union forms the heart, stretches across oceans toward other continents, in obedience to its law of being, it must encounter rivals also seeking treasure. At the points where roads converge there will almost certainly be conflicts.

"In these crucial moments races either develop genius or sink into imbecility, and the time when the people of the United States may be again tried is uncertain. Now they can arm and be ready, or they can elect the placid life which leaves the future to chance. Inertia blasted Rome under Augustus, and an easy self-complacency fostered those delusions as to the power of England which bewildered Townsend and Lord North."

Mr. Burton Hendrick's article upon tenement reform in New York City shows clearly what an honest, progressive administration has been able to do with tenements where, as Mr. Hendrick says, 2,500,000 out of 3,500,000 people live in these cramped dwellings. Some of the details are interesting. "Tenement houses now

built have a width of thirty-seven or forty feet. There are to be no more houses with dark rooms, with insufficient fire protection, with inadequate plumbing, and without the ordinary sanitary conveniences. There are no more narrow airshafts." In addition to these, and many other technical requirements for new buildings, "the department is now letting light and air into some three hundred thousand vitiated chambers,—in some instances a considerable part of the houses being reconstructed for this purpose."

The third installment of Sir Leslie Stephens' journalistic reminiscences gives intimate sketches of Carlyle, of the founding of the *Cornhill Magazine*, of *Fraser's*, and Froude as an editor; of Mr. George Smith, the publisher; of G. S. Venables, and of many journalists and journals of the period. Charles M. Skinner tells some interesting stories of Walt Whitman's career as an editor of Brooklyn papers, and gives a vivid picture of the poet's manner and attitude toward his journalistic work.

THE NORTH AMERICAN REVIEW.

THE articles on congress and the currency question in the October number of the *North American Review* have been noticed at some length in our department of "Leading Articles of the Month."

Dr. James G. Whiteley's article on "The International Position of the Pope" has also been reviewed in that department. Mr. Stephen Bonsal, writing on "The Gordian Knot in Macedonia," says: "It is generally recognized that the Turkish army as a fighting machine has become a very important factor in any settlement of the Eastern question. It should not be forgotten for a moment that something like three-fourths of the annual expenditure of the Turkish Government has of recent years been for the purpose of arms and munitions of war. The world has stood amazed at the untutored valor of the soldiers and the genius of the leaders who defended the Shipka passes and the trenches about Plevna. For twenty years, Von der Goltz Pasha and other distinguished German officers have been at work in developing the Turk's remarkable natural aptitude for things military,—with what success Bulgaria, who has been pushed into the ring by the agitators and politicians, aided by what is apparently the inevitable course of events, may shortly furnish an object-lesson."

FLOOD PREVENTION AND IRRIGATION.

Senator Burton, of Kansas, writes instructively on the question of canals and reservoirs and protection from floods, furnishing several practical illustrations of this thesis. He shows, for example, that the canals and reservoirs in the Arkansas Valley, from Pueblo down into Kansas, were sufficient to prevent any destructive flood during the unusual and heavy rains last spring, while the Kaw Valley, without such a system of canals and reservoirs, suffered the most destructive inundations in its history. Senator Burton asserts that if it were necessary to build five or ten times as many canals along the Kaw as are now constructed along the Arkansas, and with the canals a complete system of reservoirs, thousands in number, the total cost would be less than the loss of property by the last spring flood, to say nothing of the loss of life.

OUR MERCHANT MARINE.

The Hon. E. T. Chamberlain, United States Commissioner of Navigation, writing on the British Govern-

ment's new contract with the Cunard Steamship Company, shows that the ocean steamship business in every detail, from planning the ship to sailing it, is done more cheaply by the British than by the Americans. "It means almost nothing, for example, to require three-fourths of the crew of a great Cunarder to be British subjects. To require three-fourths of the crew of such an American steamer to be Americans means an additional expense of over thirty thousand dollars a year, and our naval reserves are in embryo."

THE NEW IRISH LAND ACT.

Mr. Charles Johnston writes with enthusiasm on the prospects of the Irish people under recent legislation. He shows that the land purchase scheme, while annihilating the old landlord class as such, will recreate the landlords as local capitalists, and they will have many inducements to reinvest their ransoms on the spot, where they can watch over and nurse their investments. Mr. Johnston predicts that in agriculture this capitalist will introduce or even invent new methods more economic and more modern.

MUSEUMS AS EDUCATIONAL INSTITUTIONS.

Dr. Alfred G. Mayer, of the Brooklyn Institute of Arts and Sciences, writes suggestively on "The Educational Efficiency of Our Museums." After enumerating some of the faults of the displays in our museums due for the most part to lack of judgment in the selection and poor taste in the arrangement of specimens, Dr. Mayer calls attention to a defect that is even more culpable because more readily corrected,—namely, the inefficiency of the labeling in most of our museums. Labels, he suggests, should be accompanied by colored illustrations and by maps showing the geographical distribution of specimens. Most of the descriptive labels of our museums, he says, are either too long to be readable, or are couched in terms too technical for public comprehension.

THE JAPANESE NAVY.

In an article on the growing naval power of Japan, Mr. Archibald S. Hurd predicts that Japan will soon be able to throw off the assistance of the Western world in the construction and equipment of her navy. "Already her arsenals have progressed so far that they are capable of building protected cruisers and torpedo craft destroyers as well as torpedo boats. Soon the gun factory and armor-plate factory now being established will be ready to begin work, and then the day will have dawned when Japan will bid farewell to all those Europeans, especially Englishmen, who have helped her acquire all the extensive accessories of a great power, with a voice in the councils of the world."

THE AMERICAN EMIGRATION INTO CANADA.

Mr. Frank B. Tracey, writing on "The Republic and the Dominion," says that the settlement of the Canadian Northwest is still in the experimental stage, and that the present is the second land boom which that section has had, the first having collapsed most dismally, and only twenty years ago. "The innumerable complex trials and the crushing toils of life in a new cold prairie country are beyond any one's imagination. They confront the immigrant in utterly unexpected forms, and take the courage out of men whom battle, the sea, fire, and flood would not daunt. It has taken northern North Dakota twenty years to become settled, and to be able to assert the confidence of certain and

permanent prosperity. That State has only three months of warm weather, and yet some of the loudly-vaunted Canadian land lies eight hundred miles north of the international boundary. To assert that this far northern land is certainly fruitful and a fit place for human beings is to place a heavy burden of proof on the boomers."

THE COLLEGE MAN IN BUSINESS.

President Charles F. Thwing sustains the proposition that the college man in business is worth more than the same man would be without a college education. In support of this thesis, President Thwing marshals a series of extracts from the letters of eminent men in the industrial and financial world. President Thwing's conclusion from his correspondence with these expert authorities is that the merchant, the manufacturer, and the administrator may all receive from college a training of the will more adequate for large undertakings. "The college helps to create a man of sober mindedness, or personal resolution, who is intent on things of the mind. It aids, let us believe, in nourishing the noblest type of the gentleman. But while causing these richest personal results, it is also training great executives for the great affairs of the United States and of the world."

OTHER ARTICLES.

In a clever and whimsical essay, which must be read in its entirety to be appreciated, Mrs. Edith Wharton discants on "The Vice of Reading;" ex-Justice Somerville, of Alabama, writes on "Some Coöperating Causes of Negro Lynching;" Fannie H. Gaffney contributes a rejoinder to the article by Mrs. Woolsey on "Woman's Inferior Position in a Republic," and Mr. Wilbur Larimore discusses "American Courts-Martial" and the plans proposed for their redemption.

THE ARENA.

IN the October *Arena*, Chief Justice Walter Clark, of North Carolina, writes an able arraignment of the trust power in politics, advocating especially the popular election of judges and United States Senators, the public ownership and control of public utilities, and the abolition of special privileges. His article is headed "Old Foes with New Faces."

DETROIT'S MUNICIPAL-LIGHTING SYSTEM.

The Hon. Frederick F. Ingram, commissioner of public lighting for the city of Detroit, contributes an interesting summary of that city's experience in lighting its own streets. From this appears that the public plant has now lighted the city for eight years, that the cost for the first year was less than the lowest contract price ever secured from a private company, and that since the first year the cost has steadily declined, taking into account depreciation, lost taxes, and interest at 4 per cent. on the investment. Mr. Ingram estimates that in ten years' operation the city will have gained more than the entire value of the plant (at least \$800,000) as a clean profit on what its lights would have cost on the lowest ten years' bid from a private company.

EDUCATION FOR HOME-MAKING.

Prof. Oscar Chrisman ventures the prediction that there will one day be organized a "college for the home," where young women will enter whose sole pur-

pose will be to prepare themselves for the profession of home-making and maternity.

"They will not be ashamed to say that they are preparing themselves for these duties, and that they expect to marry upon graduation, just as they now state what they will do. Such a college will attract the finest and best young women in the country, and the best young men will look to it for wives. If the young women graduates from such a college do not marry, it will not be because they will not be wanted, for women prepared for home-making will always be in demand. It will not be difficult for men to love such women."

OTHER ARTICLES.

The Rev. Dr. R. Heber Newton writes on "Emerson, the Man," Prof. Edwin Maxey on "Mob Rule," and ex-United States Senator William V. Allen, of Nebraska, on "Necessity for the People's Party." Mr. Wharton Barker advocates government currency as against bank currency. We have quoted elsewhere from Miss Knorr's paper on the housing problem.

THE INTERNATIONAL QUARTERLY.

THE current number of the *International Quarterly* (Burlington, Vt.) opens with an article by the English writer, John M. Robertson, on "Black and White in Africa," which goes far to confirm the opinion recently expressed in the REVIEW OF REVIEWS that the position of the native African in Africa is worse than his position in our own Southern States, so far as his relations with the white race are concerned.

Dr. John Graham Brooks writes on the old dispute between the socialist and the individualist on the relative importance of human character and that of environment, concluding that "for all objects that concern the actual worker in politics, in social settlements, in charity and reform administration, the socialistic contention may be accepted quite without fear that the stubborn and enduring facts which forever constitute the strength of individualism will be suppressed."

Prof. N. S. Shaler writes on "The Natural History of War," Mme. Th. Bentzon on "Marriage in France," Prof. Brander Matthews on "Greek and Roman Comedy," M. Constant Coquelin on "The 'Don Juan' of Molière," Prof. Kuno Francke on "Emerson and German Personality," M. René Puaux on "Finnish Literature," M. Joubin on "Some Masters of the Sea," Dr. Isaac A. Hoarwich on "Religious Sects in Russia," Edouard Bernstein on "Social Democracy in Germany," and Mr. Joseph B. Bishop on "Lynching."

THE CONTEMPORARY REVIEW.

THE *Contemporary Review* for October begins with an important article on the Education Act, by Sir George Kekewich, which we have noticed elsewhere. We have also quoted from the severe anonymous criticism of the Kaiser Wilhelm and from Dr. Dillon's "Fall of M. Witte."

CHRISTIAN SCIENCE.

Mr. Wake Cook writes "The Truth about Christian Science." He rejects Mrs. Eddy and her revelations, but urges every one to accept the great healing truths which are accidentally associated with her new religion. Mr. Cook's own experience is worth quoting:

"Having always escaped the dreaded influenza in

England, I was suddenly stricken down with it abroad and when alone, and at a time when a week's illness meant disaster for me. Rather short of money, and very short of the niceties of a foreign tongue, I was scared when I realized the desperate nature of the situation. But as cowards derive courage from desperation, so the difficulties of the case saved me. Realizing that whatever was to be done must be done by myself, aided by any spiritual assistance I could invoke, I took myself in hand. I resolutely stilled the tossing body; calmed the agony-distorted features into the semblance of a smile, and addressed the raging fever somewhat in this style: 'As I was a fool to expose myself as I did, I will give the fever a day or two to burn the poison out of my blood; but it must "hurry up," as I intend to be well, and shall give it no extension of time.' I indulged in a good many 'Begones!' and repetitions of 'I will be well.' This I accompanied by steady *deep breathing* (the best tonic in the world), and toward morning I dozed. I kept in bed until midday, alternately 'treating' myself and sleeping, and by that time I was so much better that I went down to lunch; and in the afternoon I resumed my work."

THE SITUATION AT THE CAPE.

There is a good article by Professor Freemantle on "The Political Situation at the Cape." Mr. Freemantle says:

"At present the Progressive party owes its force to pure terrorism. The candidates are bound down by pledges which degrade them from being representatives to being mere mouthpieces; the power of the purse is used as freely as the law permits; the press is systematically bought and blinded, and as far as possible a strict monopoly is exercised over the channels by which the exclusively English-speaking public, both of South Africa and of England, obtains its information and much of its opinion.

"There is a special obligation on Englishmen who think as they do to coöperate with the South African party, as it is admittedly desirable to organize parties on other than racial lines, and this end is not likely to be realized if Englishmen who agree with the South African party refuse to coöperate with it on the ground that the majority of Englishmen at the Cape at present support the Progressive party."

ITALY AND THE LATE POPE.

"An English Roman Catholic" compares Pius IX. and Leo XIII. He condemns the late Pope for his policy toward the Italian Government:

"Perhaps the greatest blot on Pope Leo's fame is his forbidding the Italian Catholics to rally to the Italian kingdom when he ordered the French Catholics to rally to the republic. He condemned the royalist and imperialist pretenders, but he remained a pretender himself in Rome. One can forgive Pius IX. for maintaining his rights to be King as well as Pope. But can Leo be forgiven for so plainly imposing upon others a duty that he so persistently refused to perform himself? For if the *de facto* rulers are lawful in France, they must also be lawful in Italy. As long as Pius lived it was possible to say that the Italian kingdom was not fully established. But could that be said in Leo's time?"

THE HUNGARIAN ARMY DISPUTE.

Dr. Dillon sums up the essence of the dispute between the Hungarians and the Kaiser Francis Joseph over the army as follows:

"The parliamentary party led by Kossuth's son asks that in every corps district the military courts shall try all cases, without exception, in the Magyar tongue; that the Hungarian officers now serving in Austria shall be transferred to Hungary; that in future subjects of the Hungarian crown shall not be required to serve in the other half of the monarchy; that in lieu of the Hapsburg double-eagle the Hungarian flag shall be unfurled by Hungarian troops,—namely, white banners with stripes of red, white, and green, and the effigy of Hungary's patroness, the Virgin Mary, on one side, and the monogram of the King on the other. Those are the most important points of the national programme drawn up by the party of independence, and now accepted by the bulk of parliamentary representatives in Budapest. The Emperor, whose loyalty to the constitution is proverbial, objects to these innovations, on the ground that they would destroy the unity of the army and reduce the powerful Hapsburg monarchy to the position of two second-class powers, and he refuses to concede the demands in virtue of the right vested in him by the constitution."

THE FRENCH PEASANT.

Madame Duclaux concludes her fascinating study of the French peasant. She recommends that the excessive subdivision of land, which is the curse of French rural life, should be avoided by allowing only the revenue of property, and not the property itself, to be divided between children. The republic wants decentralization, more importance being given to the country towns and rural districts. She concludes her paper as follows :

"The twenty lean years that ended the nineteenth century have witnessed the moral and mental regeneration of the French peasant. Jacques Bonhomme is no longer a mere *grippe-sou*, a mere skinflint, but a man of independent mind, with all the ambitions, aims, horizons, of a man."

THE NINETEENTH CENTURY.

THE *Nineteenth Century* for October opens with an article entitled "A Colonial View of Colonial Loyalty," noted elsewhere. Admiral Culme-Seymour writes on "The Organization of the Admiralty and War Office." He says that if the war office is to be reorganized on the model of the admiralty, it must be as the admiralty was previous to 1869. The sole responsibility of the secretary for war must be got rid of. A board where the experts are in a majority, and the civilian first lord head of the board, and its mouthpiece in the cabinet, and in Parliament, is the right organization both for army and navy.

AMERICA'S COLOR QUESTION.

Mr. J. A. Hobson writes on "The Negro Question in the United States," which he attributes entirely to a survival of the old slave-owning instincts, and to the desire of the whites to be masters. He gives figures to show that the vast majority of cases of negro lynching have nothing to do with outrages on white women. The worst negrophobe sentiment, moreover, is felt not toward the ignorant and brutalized blacks, but against the educated and progressive negroes who desire to rise in the world. Mr. Hobson describes seven million negroes in the South as to all intents and purposes slaves.

TO HELP THE BRITISH ART GALLERIES.

Mr. R. C. Witt, in an article entitled "A Movement in Aid of Our National Art Collections," describes the work which the national art collections fund proposes to do. He complains that the National Gallery is too poor to buy many pictures, which are in consequence snapped up by the Berlin and other foreign galleries. In Paris, in Berlin, and elsewhere there are societies whose aim it is to help to enrich the national galleries by buying up pictures. The national art collections fund, the subscription to which will be one guinea, will "receive loans, gifts, and legacies, whether in money or works of art, buy and present others to the gallery, or subscribe toward their acquisition by the responsible authorities. It will focus in itself a vast amount of real interest and enthusiasm already existing for our great national collections, while the prestige of membership will further encourage and call out public spirit and national pride."

THE FORTNIGHTLY REVIEW.

THE chief feature of the *Fortnightly* for October is the beginning of Mr. Frederic Harrison's Byzantine romance, "Theophano," which promises to be good style and good history, but not vital as a novel.

MODERN FRENCH LITERATURE.

A prominent place is given to M. Octave Uzanne's paper on "The Evolution of French Contemporary Literature," admirably translated by Mr. Teixeira de Mattos. M. Uzanne laments in France what is often lamented elsewhere—the good quality of second-rate and the absence of first-rate writers :

"The book—at least in France—is passing through an acute crisis. Literature, too, is dying. It has been too flourishing, too rich, too luxuriant, and too generally cultivated by an average of flattering talents instead of by a select aristocracy of the pen. The secondary talents of our time are undeniably far above the secondary talents of former days, and fame, in consequence of the prodigious production by which we are invaded, has become infinitely more difficult of attainment by writers of the first rank. Many, who would probably have been the equals of the great masters of thought in the last century, do not see the light of success at all."

Mr. Uzanne makes an interesting comment on the change which has taken place in the French character during the last twenty years :

"The Frenchman's quarrelsome, gallant, hectoring, romantic, and chauvinistic character has undergone immense changes, and, it may be, beneficial, during the past twenty years and more. The taste for scientific study, for serious experiment, for practical works, has gradually replaced the love of purely intellectual speculation. More has been asked of our writers, and human thought has had to seek its way toward spheres of social philosophy, to turn to physical analysis and exact evidence. Theories of evolution, of egotism, of experimentalism, have made a deep impression on younger brains."

WHAT IRELAND NEEDS.

There is a useful paper under this title by Mr. Sampson Morgan, who sees the economic regeneration of Ireland arising from fruit, vegetable, and flower culture :

"The Irish cultivator must adopt the latest and most

improved methods of production; he must become an exporter; he must devote himself, as the Continental and Channel Island growers do, to catering for the growing demand in the cities and towns of Britain, and if he will but do that, raising suitable crops, utilizing selected varieties of seeds, studying the wants of buyers . . . making packing an art, and remembering that quality is more important than quantity in the markets, he can depend upon making plenty of money at the business.

"I have seen around Cork land perfectly adapted for growing early forced fruit and flowers, as fine as any which enter Covent Garden Market. Here, as indeed in many other districts, tons of the most salable market-garden produce could be raised with great advantage for sending to the cities of Great Britain.

"Before this can be done effectually, several larger and specially arranged wholesale markets must be erected in Dublin, Belfast, Waterford, and Cork. Then from these centers special steamship services, similar to those run in connection with Boulogne and Havre, should be started for the purpose of carrying the produce to the chief cities of the United Kingdom."

A NAVAL UNDERSTANDING BETWEEN ENGLAND AND FRANCE.

Mr. Archibald Hurd contributes an article on "French Friendship and Naval Economy." He proposes that England should come to an understanding with France for a mutual reduction of the naval forces in the Mediterranean :

"For every man-of-war which France placed definitely out of commission, Great Britain might withdraw one from the Mediterranean and be the gainer, and, of course, if the possibility of war between France and England were minimized, the chance of the Russian ships finding an opportunity for mischief would be decreased."

Mr. Hurd thinks this project has all the more prospect of success because the French feel the burden of their fleet much more heavily than England feels hers. This is largely owing to the excessive cost of shipbuilding in France, and the great cost of their naval administration. There is as much as \$1,500,000 difference between the cost of a French and an English battleship. At Cherbourg the cost of administration is 49.3 per cent. of the total cost of the fleet, and altogether French naval administration costs relatively nearly three times the German figure.

SIR HARRY JOHNSTON.

Mr. Shan F. Bullock writes an interesting article on Sir Harry Johnston as a "Maker of Empire." He says :

"He has the empire at his finger-tips. Mention the colonies and he will quote you statistics by the column in support of his theory, and under the present system the colonies take all and give nothing, and should therefore be offered the alternative of contributing their share to the imperial exchequer or of 'cutting the painter.' Say the word empire, and he is at no pains to hide that, though still an imperialist in the best sense of that much-abused term, wide experience of empire has not altogether confirmed him in those Jingo sentiments which vexed his boyish soul long ago at Tunis. Mention the Boer War, and he will show you a letter written to *The Times* in August, 1888, forecasting accurately the trend of events in Africa during recent

years. Turn the talk upon any topic,—history, poetry, the latest play, picture or novel,—and he is ready with views and opinions. In natural science he is a specialist whose field is a continent. His work as an artist has been crowned by the Academy. In the world of letters he sits distinguished, as facile and piquant in drafting a dispatch on his Majesty's service as in dictating a volume on a section of empire. His capacity is great. His adaptability is greater. His confidence in himself is greatest of all. It may be that he thinks in protectorates. It is possible that, as Mr. Stead asserts, he resembles the great Corsican in more than feet and inches. It is more than likely that were the empire in peril tomorrow he would spring to the rescue, ready for any post and any emergency; as willing to do service as commander-in-chief or admiral of the fleet as to face destiny in the premiership of England."

OTHER ARTICLES.

Sir William Bennett writes a letter to protest against Mr. Wells' assertion that medical men are interested in nothing outside their profession. There is an article full of rather cheap sentiment, by Mr. E. H. Cooper, on "Children's Prayers and Prayer Manuals." Prince Bojidar Karageorgievitch, who was a friend of Marie Bashkirtseff, writes protesting against the blunders of some of her biographers and critics.

THE NATIONAL REVIEW.

ONE of the most interesting articles in the *National Review* for October is that in which Mr. F. B. Behr expounds the advantages of his mono-rail system. He says :

"One of the most important social problems it would solve is that of the housing of the working classes in the neighborhood of large towns. In fact, at present it appears the only way to solve this great question, which has puzzled the brains of all our leading legislators. We will take as an instance London as the most important center of the world. Supposing the existing railway companies built mono-rails along their main lines out of London, they could carry the working-class population in every direction radiating round a circle of from thirty to thirty-five miles radius in less than twenty minutes. This could be done with absolute safety and perfect punctuality.

"The zone of open country rendered available for the building of new houses and settlements would be so extensive that the prices asked by the owners of the land could not be raised unduly, because there would be such a large choice of land that if one man asked too much it would be easy to buy land from another, and, therefore, the very desire to secure a purchaser would maintain the prices at a reasonable level. Then the time employed for the journey would only be twenty minutes at the outside, and as the rails would only carry one class of traffic, and would be absolutely safe and completely guarded against derailment, the workingmen would enjoy the full benefit of the country, with the very short, punctual, and safe journey to his work and back to his home; and, in fact, the ideal condition of things would be attained,—namely, living really in the country though doing your work in town.

Mr. Behr adds that the introduction of a mono-rail alongside an existing main line would be of great benefit to the existing railway companies.

RECOLLECTIONS OF J. S. MILL.

Sir Leslie Stephen continues his interesting recollections, which are well worth reading, but not easy to quote from. The following paragraph on John Stuart Mill gives a picture of the philosopher curiously in accord with most people's preconceptions :

"I saw a slight frail figure, trembling with nervous irritability. He poured out a series of perfectly-formed sentences with an extraordinary rapidity suggestive of learning by heart; and when he lost the thread of his discourse closed his eyes for two or three minutes, till, after regaining his composure, he could again take up his parable. Although his oratory was defective, he was clearly speaking with intense feeling, and was exceedingly sensitive to the reception by his audience. Some of his doctrines were specially irritating to the rows of stolid country gentlemen who began by listening curiously to so strange an animal as a philosopher, and discovered before long that the animal's hide could be pierced by scornful laughter. To Mill they represented crass stupidity, and he became unable either to conceal his contempt or keep his temper. Neither his philosophy nor his official experience had taught him to wear a mask of insensibility."

THE Isthmian CANAL.

Mr. Low declares that it was the intrigues of the American railway companies which led the Colombian Senate to reject the Panama Canal treaty :

"To speak quite bluntly and with brutal frankness, the rejection of the canal treaty is due not so much to the disinclination of the Senate of Colombia to permit the building of a waterway under American control throughout its territory as it is to the ability displayed by the emissaries of certain American railway companies in making the members of the Colombian Senate understand how detrimental to their interests it would be if the treaty were ratified. Of course, the usual arguments were used. There is one argument the legislator of a certain class always understands, whether he lives in the America of the North or the America of the South, and that is the golden one of dollars, francs, or pounds sterling."

THE LABOR WING OF THE LIB.-LABS.

Mr. Richard Bell, of the Amalgamated Society of Railway Servants, writes on "The Reign of Labor."

"The Liberal party, instead of showing fear at the formation of a strong 'Labor' party, should welcome it with pleasure, for it will embody all that is Liberal and more, and is certain to go faster. It ought to be the business of the Liberal party to remove every obstacle which prevents the accomplishment of the aspirations of this class of the community and encourage the entrance of all capable men to the House of Commons."

Mr. Bell declares that the Labor party is sound for free trade, and that none of Mr. Chamberlain's bribes will have any effect upon it.

THE EMPIRE REVIEW.

IN the *Empire Review* for October, Mr. James Reid, of New South Wales, makes a strong attack upon what he calls "The Anti-Imperial Policy of Australia," a policy which, he says, shows how little reliance is to be placed on Australian professions of loyalty to the imperial ideal. He condemns the policy of the Australian Government in trying to deprive British Indian

subjects of their right to work on mail steamers as "a gross act of oppression," and demands that the Postal Act in which the provision is included should be disallowed. The imperial government has a right to protect the people of any part of the empire against oppression by any other part.

CHINESE SERVANTS.

Mr. Douglas Knocker describes the Chinese servant, of whom he gives a by no means flattering account. He gives the following description of one method of effecting small thefts, "which commends itself and is common. There is first a gradual sinking into obscurity of a coveted article. A curio begins by standing on the mantelpiece; presently it slides behind a picture frame for some days; then, if its absence is not noted, it goes to a more distant part of the room, and is almost entirely hidden for a week or more. One day, some time later, the mistress has a 'turn out,' and quite by accident saves her curio by finding it hidden away at the bottom of a rarely-opened drawer."

PEARL-FISHING IN AUSTRALIA.

Mr. A. Macdonald writes a picturesque description of pearl-fishing off the Australian coast. He himself went down in a diving-suit, and was very nearly drowned owing to a leakage of the helmet.

"I found it no easy matter to regain the perpendicular, and my head bobbed like a football on the coral bottom for some time before I succeeded in my efforts; but the sight that met my gaze then was sufficient reward for all my sufferings. I stood in the midst of a magnificent marine forest, where graceful coral branches intertwined with less material tendril growths. Delicate fernlike plants covered the honeycombed snowy rocks, and enormous Neptune's cups appeared here and there among the clinging vegetation. The fronds of the coral palms trembled as if in a gentle breeze, and the more robust growths swayed slowly to and fro. It was as if a luxuriant tropical thicket had been submerged, and yet retained its pristine grace and beauty. My radius of sight was but a few yards, unfortunately; beyond that all was blurred and indistinct as a picture out of focus. I tried to walk, and at once realized that my limbs would hardly obey my will; the pressure of the water had cramped them so that my movements were like those of an automaton,—and this at a depth of less than a hundred feet. Shellfish of all descriptions were scattered around, and among them I observed a solitary pearl oyster, and I picked it up as if it were of the rarest value and placed it in the net."

THE INDEPENDENT REVIEW.

THE *Independent Review* is the latest recruit to the ranks of the English "half-crown" monthlies. It is edited by Mr. Edward Jenks, assisted by an editorial council of well-known Oxford and Cambridge men, and, in the words of the publisher, "will not be attached to any political or other organization, but will maintain a decisively progressive attitude on political and social questions." The *Independent*, as it will probably come to be called for the sake of brevity, is published by Mr. Fisher Unwin; it has a tasteful cover, and is printed in large type upon good paper. As to the contents, only one general criticism can be applied: the articles are well-written and decidedly literary in

tone, but somewhat academic and abstract. But that is not necessarily a defect.

The number opens with an anonymous plea for a programme, which is largely a retrospect, and deals rather with the principles of future Liberal legislation than with immediate questions. This paper is followed by an article on "Social Reform" from the pen of Canon Barnett. After this come two papers on the British fiscal question, and a paper by Mr. Birrell, M.P., on "Elementary Education," in which the writer emphasizes the fact that any educational settlement must be based upon compromise. Mr. Birrell's own views are indicated in the following passage:

"Why should we not provide a good, sound, secular education for the children of everybody who cares or is obliged to send his children to a public elementary school, and at the close of each day's secular work, for which alone the tax and ratepayer will be responsible, allow the children to receive in the schoolhouse the religious instruction their parents desire them to have? Who then can complain?"

There is an article on "Ecclesiasticism," which Mr. G. Lowes Dickinson, the writer, defines as laboring deliberately to fix the mind and character permanently in a certain mold, so far at least as fundamentals are concerned. Mr. Hector Macpherson writes on "The Evolution of Scotland." Professor Mommsen's "Appeal to the English," which is printed in both German and English, is a very brief warning of the dangers of enmity between the two nations. Dr. Mommsen insists upon the fact that the anti-English movement in Germany was due primarily to the South African War; but, in spite of this, he asserts that Germans feel themselves more nearly akin to the English than to any other nation.

The number concludes with the first installment of a satirical novel, "Mr. Burden," by Mr. H. Belloc, which begins delightfully.

THE SPIRIT OF THE CONTINENTAL REVIEWS.

THE MACEDONIAN ATROCITIES.

IN the second September number of the *Revue de Paris*, M. Bérard gives us the full text of the striking memorandum which the Bulgarian Government addressed to the European powers last August. This document is certainly a terrible indictment of the Ottoman Government, and it is all the more terrible because the atrocities recorded in it are set out in the most business-like manner, arranged under geographical headings, and in a large number of cases the names of the wretched victims are recorded.

DIESTABLISHMENT IN FRANCE.

M. Charles Dupuy, the ex-premier, discusses in the first September number of the *Nouvelle Revue* the question whether the churches should be disestablished in France. It is not a question only of the Catholic Church, but of the various Protestant and Jewish denominations which also receive subventions from the state. His own conclusion is that the Concordat should be maintained in the interest of the republic. If, however, the Concordat should be abolished, he prefers the plan of M. Réveillaud, by which the disestablished ministers of the various religions would receive pensions graduated according to their ages. On the general

THE WESTMINSTER REVIEW.

IN the *Westminster Review* for October there is a very interesting article by Mr. T. Filipowicz on "The Political Situation in Poland." The Russian Government, he says, has made strenuous efforts to attach to itself the Polish peasantry, but it is beginning to lose this mainstay, as the revolutionary propaganda is spreading among the peasants. The industrial movement has turned many of the peasants into factory hands and mechanics, and among these various forms of socialism flourish. Mr. Filipowicz quotes official documents which show that the late Prince Imeretinsky warned the government that it was losing its hold on the peasantry, and he comments on this warning that nothing but a special administration suited to Polish needs will secure any measure of support from any class of Poles.

THE MONTHLY REVIEW.

THE first paper in the *Monthly Review* for October is an unsigned editorial on Lord Salisbury, after which follow papers by Sir Edward Grey, Lord Hugh Cecil, and Dr. Goldwin Smith, all dealing with the British tariff question. Sir H. Drummond Wolff writes on "British Policy in the Balkans." There is an amusing fable, "The Two Sheepdogs," Goff and Brum, satirizing Mr. Balfour's clever little shuffle with Mr. Chamberlain. The illustrated article is by Mr. Basil de Sélincourt, and is a study of the secrets from the life of Christ in the Lower Church at Assisi.

Prof. Rodolphe Lanciani contributes an interesting article on "Bankers and Brokers in Ancient Rome," the site of whose operations has recently been discovered. Professor Lanciani mentions the remarkable fact that in Trajan's time money was invested on mortgage at as low interest as $2\frac{1}{2}$ per cent. In general, banking seems to have been carried on on very modern principles.

question he thinks that disestablishment would really increase the power of the clergy, for it would set them absolutely free for whatever propaganda they wished to set on foot, and that is evidently why, as a good Republican, he prefers to maintain the Concordat.

A ROMAN CATHOLIC VIEW OF TOLSTOY.

An article which has recently appeared in an Italian newspaper, concerning the visit of Italian priests to Leo Tolstoy, gives occasion for an essay in *Civiltà Cattolica* for September, on the religion of that writer, and how it differs from that which should be held by a Catholic priest. Tolstoy declares that he is a follower of the pure Evangel, which is a gospel without a God, without the Son of God, without a church, says the author of this contribution. The social obligations of the upper classes form the subject of a contribution which gives much food for reflection; it has for its text the words of an encyclical, which sets forth eloquently the fact that whoever has been the recipient of great gifts, spiritual or otherwise, should use them for the common benefit as well as for his own perfection.

THE BUDGETS OF EUROPE.

M. Lévy, in an interesting article on the deficits and surpluses of the European budgets, contributed to the

Revue des Deux Mondes for September, notes as a singular circumstance that the beginning of the twentieth century sees the credit of some states, such as Italy and Spain, rising in a notable proportion, while the credit of France, England and Germany suffers an eclipse. The position of England, he says, is like that of a man who awakes after a night of drunkenness. He counts up all the various war loans, notes the constant increase of municipal indebtedness, observes that the Irish land act means the borrowing of another large sum, and sets out the considerable increase in the army and navy estimates. He arrives at the conclusion that England has come to the limit of the taxation which she can pay. While consols have fallen something like twenty points below their highest, M. Lévy points out at the same time that British credit is the first in Europe if we take the yield per cent. of the various government stocks at present prices, but it is not nearly so much ahead as it used to be. Italian funds have risen some ten points, and a still more remarkable rise has taken place in Spanish fours. These two countries have profited by "peace, retrenchment and reform." Italy has recovered from the megalomania of Crispi, while Spain has actually profited by the loss of her colonies. In France, on the other hand, even in profound peace, the budget, both civil and military, continue to grow without reason. It is much the same thing in Germany. Altogether, the credit of no civilized state stands higher than that of the United States, to whose extraordinary prosperity M. Lévy pays a warm tribute. His general conclusion is that financiers ought to realize that there are limits to the taxable power of peoples.

THE TRADE OF HONGKONG.

A. von J. Sanson writes in the *Deutsche Rundschau* upon Hongkong as an ideal colony. Germans are in evidence in Hongkong, and the writer hopes that his countrymen will succeed in bringing their own colonies to anything approaching its flourishing state. He mentions that, in 1900, seventeen thousand laden ships entered the port, of some four and a quarter million tons burden. This does not include the huge number of Chinese boats and junks. The total yearly trade in the free port of Hongkong is reckoned at fifty million pounds, and the total exports in 1895 exceeded those of London by 766,000 tons, not reckoning junks. The Chinese, with one and a quarter million tons yearly, come next to the British, with four and one-half million tons; then come the Germans, the Japanese, the French, the Americans, the Norwegians, the Austrians, the Russians, the Dutch, the Italians, the Danes, the Belgians, the Swedes, and last of all the Portuguese with only 5,866 tons. It is interesting to note that the Dutch and Portuguese trade has fallen off, while the German and Japanese has increased, but without approaching the British at all. Russia has her own ports, and is connected by land with China, so the volume of her trade through Hongkong is, of course, small.

A STORY OF MODERN CHINA.

M. Pettit gives in the *Revue de Paris* for September, two more installments of what is really a remarkable study of modern Chinese life, written in the form of fiction. It is the tale of a native singing girl who, having been deceived and abandoned by one of the "foreign devils," conceives an undying hatred of all foreigners. She is fortunate enough to inspire a mandarin of great importance with a genuine passion. The account of

this dignitary's sufferings is really touching; he can hardly understand what has happened to him, he only knows that he is willing to sacrifice everything that a Chinaman holds most dear,—even to the extent of insulting the ashes of his father,—for the sake of his overmastering love for this girl, and his agony when she deserts him for a mere soldier rises to the height of tragedy. Incidentally, there is a wonderful description of the murder of a Christian bishop by Boxers after all his flock, save five only, have abandoned their faith and insulted the Cross. To the last he prays: "Father, forgive them, for they know not what they do."

MODERN THEOSOPHY.

In *Onze Eeuw*, the Dutch magazine, Prof. Chantepie de la Saussaye gives us another installment of his "Impressions and Opinions," dealing this time with what he calls "The Modern Theosophy," that mystic religion which has claimed many strong minds, including that of Mrs. Annie Besant, whose personality is fading from our own minds. Mystic and theosophist, says the writer, are uttered in the same breath, are regarded as synonymous, but they do not follow the same path all the way through. The one is a spiritualist, the other is a materialist; the one turns from the material world, the other turns toward it. Each, in seeking for greater enlightenment, goes off in a different direction to look for it. The professor has a leaning toward theosophy, and he writes attractively on a subject which is, in itself, mysterious and not especially easy for the ordinary reader to comprehend. The other contents of this excellent review are worth perusal.

AN ITALIAN CRITICISM OF MARION CRAWFORD.

Nuova Antologia (September 1) contains an interesting review of the works of F. Marion Crawford with respect to that author's ideas of Rome and of Italy in general. Mr. Crawford has thoroughly understood the capital of United Italy and the character of its inhabitants, but he has not properly grasped the very complex character of the Italians as a whole. His observations concerning their simplicity, their religious ideas, and many other characteristics are correct enough; he has quite understood the inter-provincial disagreements and sentiments; but he denies that they are a people gifted with artistic fancy, and makes similar statements equally erroneous. The writer speaks of Mr. Crawford's special views on the fight for the temporal power of the Papacy, his detestation of the Garibaldian revolution, and his admiration for the personality of Victor Emanuel II., as well as many other things known to readers of Mr. Crawford's novels; the whole forms a good introduction to his works for those who have not perused them, and the article is illustrated with a portrait.

CHILDREN'S WHIMS.

In its issue for September 16, the *Nuova Antologia* contains a thoughtful article on the whims of children, giving the results of the author's study of an important and complex subject which has remained a mystery because psychologists and teachers have not considered it worth studying. Signora Paola Lombroso thinks it most decidedly worth studying, for if these whims are not corrected there is danger to the race. The cause of a violent outburst of tears and anger is often quite disproportionate to the violence of the outbreak; the fit of the sulks continues in many instances long after the

cause has entirely vanished from the child's mind. These are such common phenomena that we take them as a matter of course ; yet we ought not to do so.

SEX IN HANDWRITING.

M. Alfred Binet, director of the psycho-physiological laboratory at the Sorbonne, discusses, in *La Revue* for October 1, the question whether sex betrays itself in handwriting, and if so, how. The article is illustrated with fourteen facsimiles of envelopes addressed to him, Madame, or Mademoiselle, Binet. He called in two experts, and a number of intelligent people, of widely different ages and occupations, but ignorant of graph-

ology. His conclusion is that sex certainly does betray itself in handwriting, though age is not so markedly shown. The sexual differences are seen alike by students of graphology and those ignorant of it, but the former can give more clearly the reasons why they think such and such writing is that of a young woman, and such and such another that of an old man. In the most favorable circumstances, the correct guesses number 90 per cent. ; but occasionally a feminine handwriting is universally taken for a man's. Clear, simple, firm writing is characteristically masculine ; more embroidered handwriting, with certain letters unduly tall, is characteristically feminine.

POPULAR TOPICS IN THE SCIENTIFIC JOURNALS.

THE numbers of *Nature* for September are largely taken up by the formal addresses of the British Association for the Advancement of Science. These addresses generally give a *résumé* of the subject treated by the speaker, and very commonly they are of an historical character. Some of the addresses are pretty technical, but others contain much that interests the popular reader. The address of Mr. Charles Hawksby before the section of engineering, while treating of modern engineering in general, devotes some special attention to the subject of water supplies from the engineer's standpoint. He has nothing especially new to say on the subject, but as a concise statement of the methods of securing water in the United Kingdom it is admirable. His remark that water obtained by gravitation is almost, if not quite, as expensive as water obtained by pumping may be something of a surprise to a layman, but is easily explained by the greater cost of gravitation works. The address of the president, Sir Norman Lockyer, is of marked popular interest, for he takes up the subject of Britain's failure to succeed in business competition with Germany and the United States. He finds the remedy in an increase in the universities and in greater attention to pure research. He advocates large expenditures of public money to bring this about, saying that Great Britain should have eight new universities. The money can be raised, if the need is really felt, as England raised the money to rebuild and equip its navy, when the navy bill was passed in 1888.

THE BIRDS OF EGYPT.

The main article of the last number of *Ornis* is a somewhat elaborate one entitled "Considérations sur les Oiseaux d'Egypte," by Dr. Quinet. Like so many of the articles written by French and German authors, it is unmercifully spread out, but nevertheless it does contain a large amount of information in regard to the birds of Egypt and their migrations. He says that the birds of Egypt are, to a large extent, like those of Europe, but it is very noticeable that the woodpeckers and tomtits are wanting. The migration tables in connection with the article are very extensive. In his charts of migration, the striking thing to a layman is that the lines of movement of the birds are so generally on a

northeast and southwest line. Of course, there are some exception to this general direction, like the lines between Iceland and Great Britain, and those between Great Britain and the Continent.

A GERMAN ZOOLOGICAL STATION.

Of all the work done by the German people for the advancement of scientific research, perhaps none has been more fruitful than the establishment of zoological stations, of which the one at Naples is by far the most complete and most noted. Therefore, the article begun in the September number of *Der Zoologischen Garten* by Hans Zimmerman, describing a visit to the station of the Berlin Aquarium at Rovigno, is of a good deal of interest. Zimmerman gushes like a boarding-school girl, and distributes the technical names of plants and animals in a promiscuous and entirely unnecessary manner, but, nevertheless, the article is interesting as describing a somewhat elaborately-equipped station. The building is a rather imposing one, three stories in height, fitted with large aquaria, laboratories, and living rooms for those connected with its work. German biologists may well take pride in such permanent stations, which are almost ideal in their arrangement.

EXERCISE AND ALCOHOL.

In *La Nature* of September 5 is an interesting short article on the influence of muscular energy in eliminating alcohol which has been introduced into the blood. M. Grehant made a series of experiments, dosing with alcohol, and then examining the blood after a varying number of hours. He found that under ordinary circumstances the elimination of alcohol was extremely slow. He then had constructed a wheel three meters in diameter into which a dog could be placed and kept moving. Alcohol was introduced into the stomach of the dog, and after five hours in the wheel its blood was examined, when it was found that the alcohol had diminished much more rapidly than when the animal was not exercising. M. Grehant commends the result of this experiment to the consideration of men who have somewhat over-indulged, and suggests that experiment might show beneficial results from carriage riding when the degree of "ivresse" was too great for walking.

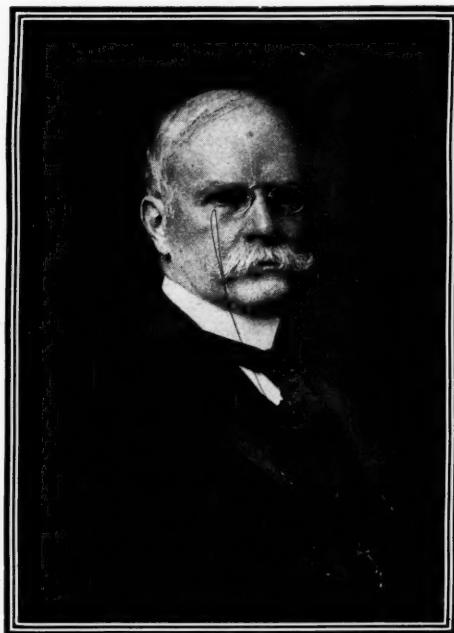


A GLANCE AT THE NEW NOVELS.

THE rapid-fire production of novels during the last few seasons has given rise to the remark that novel-writing has become a disease and every one has it. It came about, perhaps, in two ways: some stories, like "David Harum," had been very successful commercially, and there was a distinct wave of creative impulse evident. Now, although a considerable number of novels were published in midsummer, something scarcely attempted before "Richard Carvel's" quick popularity, there is an increasing hesitancy among publishers about launching too many books of fiction in a season. Only three or four novels recently published seem likely to reach one-fifth of "David Harum's" wide circulation. So much for the business viewpoint. People are reading as much as ever,—only there are more books and constantly new and inexpensive ways of getting them. But the creative impulse is still evident. More fiction of good quality is being written, perhaps, than ever before, and if there are more students than masters of the art, it is to be remembered that a book, however faulty, is a better sign of literary progress than a book about a book. The only writers whose earnestness lessened sales will affect are those like a man we know who recently brought an adventurous tale to a publisher, and said frankly, "I've studied these successful novels and learned the trick,—I think this book will sell." His book, by the way, is not published yet.

Of the newer books, while there are still many historical and adventurous romances, the people and places and problems of the present day seem to be in-

teresting the novelists and readers more, not the realism of commonplaces uplifted by personality, but the splendid, sincere, imaginative realism that Frank Norris laid the way for, if he, himself, could not realize it. And the most notable books are more generally the most widely read. Publishers are hoodwinking readers less easily with each successive season. The popular books of the last months, for example, have been, according to reports, Mr. Allen's "Mettle of the Pasture" (Macmillan), Mr. London's "The Call of the Wild" (Macmillan), Mr. Page's "Gordon Keith" (Scrib-



JAMES LANE ALLEN.



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THOMAS NELSON PAGE.

ner), Dr. Dixon's "The One Woman" (Doubleday), Mr. McGrath's "The Grey Cloak" (Bobbs-Merrill), and Mr. Fox's "The Little Shepherd of Kingdom Come" (Scribner). Critics might quarrel with public for some of these selections, and yet in each case a sane reason for their popularity is evident. "The Call of the Wild" is almost epic. The dog which is carried from luxurious California into elementary Alaska, and returns naturally to his own, is, after all, only an evidence of the workings of the spirit of the wilderness. The story is vital and true, and in it and through it you feel the lash of the northern wind, the oppression and the exaltation of an undiscovered, primitive land, the mysterious, ruggedly poetic touch of primitive nature; you yourself hear the insistent call of the wild. The sense of this virile book remains as a permanent possession. "The Mettle of the Pasture" is diametrically different.

Here is human tragedy resultant from human weaknesses of many kinds. The young man and woman who are separated by his earlier sin, and who suffer through the cruelty of their friends, are brought together only after the ruin of their happiness has been accomplished. Mr. Allen has still the grace of good writing and a sense of the more delicate poetry of nature. The story of "The Little Shepherd of Kingdom Come," his boyhood in the Kentucky mountains, his youth in the settlements, and of how, in his manhood, he fought for the Union with and against his friends, grips one with its strong virility and its gentle tenderness. Chad is unforgettable, and it is all so human and true that you feel that your finger has been on the pulse of the most dramatic heartbeats of our national life. "Gordon Keith" is the story of a young Southerner who, born a gentleman, is forced, because of the ruin the war brought his father, to make his own way, which he does manfully and as becomes a gentleman, in Virginia



MRS. NANCY HUSTON BANKS.

and in New York. That the author personally felt this story deeply is evident. No detail is spared, and if this sometimes clogs the action of the book, it is all done with the charm and truth to life which made "Red Rock" a literary achievement. The people of the Virginia country are more human and attractive than the city folk in the story, exactly as they are in real life. Certain and not-to-be-neglected vigor and force make "The One Woman" important. The story is about a young socialistic preacher in New York who, though married, falls in love with a rich girl who helps him to carry out his theories for social equality and salvation. He leaves his wife, and is married to the other woman by the socialistic marriage ceremony; but she, in turn, passes him by for a friend of his, whom he kills in a duel with knives in the dark. His wife stands by him through it all, and, finally, saves him from the death penalty for murder. The story is sensational and melodramatic; every color in it is flamboyant, and every sound a scream. But it is powerful with elementary force, and the passages describing the life of a city preacher carry weight by a sense of personal experience. "The Grey Cloak" is a typical historical romance of the time of Mazarin. The main characters hurry from France to Quebec,

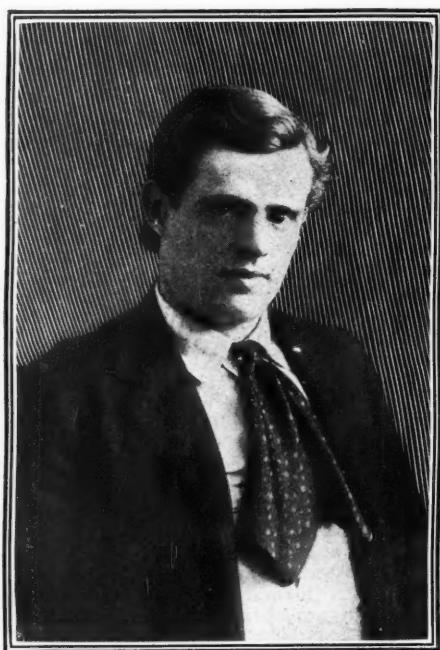
because a paper is abroad which will ruin them. In the Canadian wilds, the four men, in love with one lady, struggle for supremacy, and all but the lover are killed. The action throughout is stirring, and the web of intrigue and misunderstanding is unwoven only at the end. The most sympathetic character in the book is a young priest, who is the illegitimate son of the hero's father.

HISTORICAL ROMANCES.

The number of new American historical stories is comparatively small. In "Peggy O'Neal" (Biddle: Philadelphia), Alfred Henry Lewis has written both an interesting tale with a charming heroine and a clear-cut characterization of Andrew Jackson. Frederick Palmer's "The Vagabond" (Scribner) is an interesting story of the Civil War, with



THOMAS DIXON, JR.



JACK LONDON.



CUTCLIFFE HYNE.



JOHN FOX, JR.

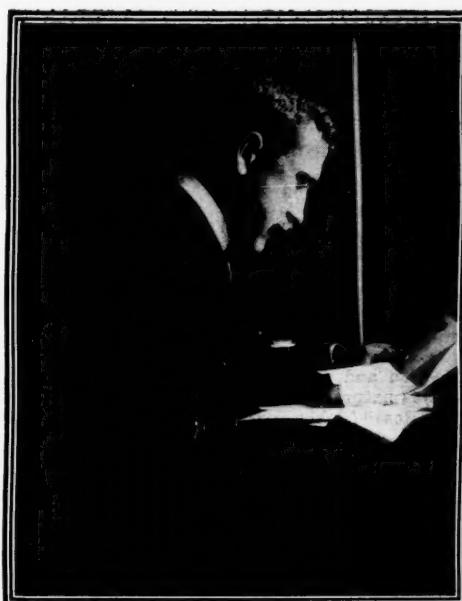
a hero who is, perhaps, even more attractive as a child, searching for a mountain, a mine, and a maid, than in his war setting, and a charming heroine who is loyal to the South, but who surrenders with it. "Round Anvil Rock" (Macmillan), is another of Miss Nancy Huston Banks' Kentucky stories, its scene laid in pioneer days. It is a pretty love story and a dashing historical romance rolled into one. Here, again, is Andrew Jackson, but in the days before he was "the General." "A Spectre of Power" (Houghton, Mifflin) takes the reader South, into Tennessee, in the primitive times of the struggles between the French, English, and Indians. Charles Egbert Craddock has written a rattling adventurous story. "On the We-a Trail" (Macmillan) is one of a large number of novels of the pioneer West. This one, by Caroline Brown, is not greatly different from its predecessors, but holds the reader by its crowding incident and adventure.

Historical stories with a foreign setting are more numerous. Stanley Weyman's "The Long Night" (McClure) is different in its first chapters from any of his previous novels. These describe the superstition of old Geneva; but soon the action quickens, and in the end comes the dashing fight between Savoy and Geneva, done characteristically. The love story is charming, but Mr. Weyman is always better in a fight than anywhere else. "The Adventures of Gerard" (McClure) are the braggadocio accounts of the prowess of a Napoleonic soldier, told by himself. Though written by Conan Doyle, these stories are more like Weyman than is "The Long Night." Robert Chambers' "The Maids of Paradise" (Harper) is a characteristic story of the Franco-Prussian War, with a more human hero and a more inhuman villain than he usually indulges in. Among others deserving mention are "Castle Omeragh" (Appleton), by

Frankfort Moore, a very historical story of Ireland in Cromwell's time; "Gorgo" (Lothrop), a story full of the atmosphere of ancient Greece; "The Spoils of Empire" (Little, Brown & Co.), a love story with old-time Mexico as a background; and "The Sins of a Saint" (Appleton), a virile romance of old England.

TALES OF ADVENTURE.

Cutcliffe Hyne's "Captain Kettle" is imperishable; and McDodd and Thompson, the heroes of his two latest books (Macmillan), are as real, if less well rounded and novel; and no one makes the sea so real and vivid a background for restrained, never-labored or melodramatic action. His terse, clean-cut writing contrasts with the easy flow of Clark Russell's "The Captain's Wife" (Page: Boston). Invention rampant characterizes "The Wings of the Morning" (Clode), but none will put aside the book until the last of hundreds of hairbreadth escapes is over and all live happy ever after; nor can one easily leave "The Golden Fetish" (Dodd, Mead), Eden Phillpott's well-told story of the adventures of a young Englishman in the heart of Africa. "The Red Triangle" (Page) is a new detective story, by Arthur Morrison, which would be striking if we had never known Sherlock Holmes, and "Murray Davenport" (Page), unlike Mr. R. N. Stephens' previous stories, is laid in New York of the present day. It has, however, Mr. Stephens' characteristic thrilling and melodramatic climaxes. "The Love of Monsieur" (Harper) is a new French romance, by George Gibbs, after the style of Dumas and Weyman; "Barbe of the Grand Bayou" (Dodd, Mead) is an exciting and rather powerful story of the Brittany coast by John Oxenham; "The MS. in the Red Box" (Lane) is a story of daring in seventeenth-century England which, like many others, has difficulty in being as



FREDERICK PALMER.

interesting as its publisher's announcements; "The Yellow Crayon" (Dodd, Mead) is another novel and interesting tale, by E. P. Oppenheim, having to do with



KATE DOUGLAS WIGGIN.

the Order of the Yellow Crayon, a secret society of nobility, formed to put down socialists and anarchists.

STUDIES OF A SINGLE CHARACTER.

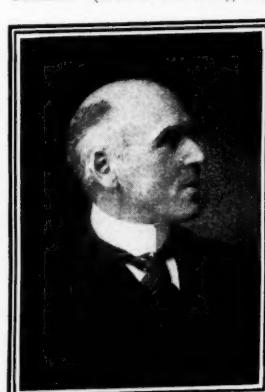
Kate Douglass Wiggin has never written a more quaint story than "Rebecca of the Sunny Brook Farm" (Houghton, Mifflin), nor has she created a fresher, more subtly-conceived character than Rebecca. It is altogether charming, reposeful art. "Darrel" (Lothrop) is another of Irving Bacheller's north-country characters, full of charming sentiment and humor, and always talking as if he knew many were listening. "Andy Barr" (Lothrop) is still another homespun philosopher, who is the central character despite the love story and the glimpse of the Civil War. "The Glidden" (Dicker- man) is another variant of the type. "Wee MacGregor" (Harper) is the quiet tale of a Scotch lad and his very human father and mother. Mr. J. J. Bell writes with distinction and charm. "My Friend Annabel Lee" (Stone) is naturally all about Mary McLane, and "My Mamie Rose" (Baker-Taylor) is the frank autobiography of Mr. Owen Kildare.

STORIES OF AMERICAN SOCIAL LIFE.

George Barr McCutcheon's recent story, "The Sherrods" (Dodd, Mead), deals with an attractive but weak artist who loves two women and marries both. His discovery makes clear the nobility of both women, and of an old country rival whose love has regenerated him. It is a strong American story, written clearly and forcibly, but with artistic restraint, about an old theme. It

has the freshness of "The Gentleman from Indiana." New York is the scene of many stories of city life. Howard Pyle's "Rejected of Men" (Harper) is a reverent attempt to show how New York would receive Christ's coming, and the old story is told with a modern background. Arthur Stringer's "The Silver Poppy" (Appleton) is a strong story of human inhumanity and weakness in literary Bohemia. "The Girl of Ideas" (Scribner) shows another side of New York literary life. "Whitewash" (Dana, Estes) and "An April Princess" (Dodd, Mead) are crisply-written stories of New York fashionable society and Bohemia, while "The Dominant Strain" (Little, Brown), though primarily a character study, is written against a background of musical and music-worshiping New York. "The Millionaire's Son" (Dana, Estes) is an unusually vital picture of a young man who, by a sharp experience with his worldly-minded father, proves to himself that he is more scholar than business man. Like "The Dominant Strain," it is a study of a character that has two twists instead of a bent. "The Mills of Man" (Rand, McNally) is a story of modern business, and "The Story of an East Side Family" (Dodd, Mead) the realistic evolution of a young couple who fight their way up together by thrift and industry. Miss Alice Brown's "Judgment" (Harper) is an exquisite small-bit of literary workmanship. The story of the frail, large-hearted woman who lives for others, and of the final judgment of her hard though intentionally just husband, is intensely human. It is a paragraph from real life.

Harold Wilson's "The Spenders" (Lothrop), which contrasts with keen analysis the old mineworker and his city-living, luxury-loving grandson, has been succeeded by "The Lions of the Lord" (Lothrop), a tale of the Mormons; and if it is less universal and less finely drawn than its predecessor, it is nevertheless, fresh and virile writing. There are a considerable number of strong, healthy stories of American country life, strong and healthy as contrasted with the cleverness of the city tales. Arthur Pier's "The Triumph" (McClure) is an example, with its scene laid in the oil regions, and showing the author's increasingly firm grasp of character and situation; "The Red Keggers" (Booklover's) is another, a story of the lumber district; "The Redfields' Succession" (Harper), with the modern South as a background; "The Beaten Path" (Macmillan), a realistic story of American commercial life; and "The Main Chance" (Bobbs-Merrill), with the scene laid in a Western town, and with a rather interesting villain. More notable are Mrs. Burnham's second Christian Science story, "Jewel" (Houghton, Mifflin), Gwendolen Overton's "Anne Carmel" (Macmillan), and Anna McClure Sholl's "The Law of Life" (Appleton). These two latter stories, — one of a girl whose passionate, unseeing love of a man of the world is kept from ruining her only by her devotion to her brother, the other, of a young



HOWARD PYLE.

wife of an older, academic man in a modern college, who loves and is loved by a young and daring instructor, but who finally triumphs over herself and him and obeys the law of life,—are exceedingly acute studies of the sex problem and of marriage conventions. "A Gentleman of the South" (Macmillan) is a story which carries a study of the old-time Black Belt. Dr. Brady's "Doctor of Philosophy" (Scribner) details the tragedy caused by a strain of negro blood in a charming girl, and "Good-bye, Proud World" (Houghton, Mifflin), is an entertaining tale of a girl who leaves the city for a quiet Connecticut town, and of her further quiet adventures in quiet surroundings.



GWENDOLEN OVERTON.

STORIES OF FOREIGN SOCIAL LIFE.

Charles Marriott's "The House on the Sands" (Lane) is written against a background of English politics. The hero loses his career in his love for a woman who has lived platonically with a social theorist. The story, quietly and artistically told, and full of keen character analysis, contains some comment on America that is interesting. "Americans don't think," says Tate, "they calculate; they are amazingly clever, but not very wise; they have no statesmen, only politicians." "Felix" (Stokes) is a very strong if somewhat morbid story, by Robert Hichens, of an English country boy who reads Balzac, falls in love with a *morphineuse* in London, and is finally reclaimed by his love for his mother. "Pigs in Clover" (Lippincott) is another morbid though forceful story, with a couple of weak women and a vigorous Jewish financier, who works between South Africa and England, and his devil-like brother as leading characters. "Place and Power" (Appleton), "Twixt God and Mammon" (Appleton), and "Stay at Homes" (Longmans) are intimate studies of English social life, and "Eleanor Dayton" (Lane), a readable story of an American girl in the Paris of the Second Empire.

CHEERFUL LOVE STORIES.

Justus Miles Forman's stories have an indefinable poetic charm throughout, and his "Monsigny" (Doubleday), a slight tale of the picturesque old castle of that name, is potent as pretty dreams are potent. "The Land of Joy" (Doubleday) is another frank, cheerful story of the love affairs of two college men at Cambridge and in Virginia. "Kidnapped" (Harper) is a cheery yarn, by Mary Raymond Shipman Andrews, of young American daring and a lively love affair. "The Castle of Understanding" (Harper) is a pretty love story, full of delicate humor, and exceedingly attractive in its drawing of the youthful hero and heroine; and "The Man With the Wooden Face" (Fox, Duf-

field) is similarly and differently simple and pretty, a crisp little story of the present day. Molly Elliot Seawell's "The Fortunes of Fifi" (Bobbs-Merrill), a light and pretty love story of France of the First Empire, and Onota Watanna's poetic Japanese tale, "The Heart of a Hyacinth" (Harper), both show a delicate sense of literary fitness.



CLARA LOUISE BURNHAM.

SHORT STORIES.

Publishers are slow to print volumes of short stories, and, as a result, most of the new collections are written by authors whose names will carry the book to some considerable success. Another result is that some of the best writing of the season is in them. "Trent's Trust" (Houghton, Mifflin) has much of the earlier Bret Harte in it; F. Hopkinson Smith's art, essentially a short-story telling one, is at its best in the reposeful stories in "The Under Dog" (Scribner); Frank Norris's virility and rugged realism come out strongly in some of the other stories than "A Deal in Wheat" (Doubleday), which gives the name to the volume; Mrs. Steel's mastery of incident has never been so clearly revealed as in the India tales of "In the Guardianship of God" (Macmillan).

Alfred Henry Lewis's stories, told at "The Black Lion Inn" (Russell), are national in their interpretation of character and in the swing of dramatic incident; and George Ade's stories, "In Babel" (McClure), show that he is a more facile master of short-story writing than he is of slang. Other interesting collections are Seumas MacMannus' "Red Poocher" (Funk & Wagnalls), characteristic Irish stories; "Earth's Enigmas" (Page), some more of C. G. D. Roberts' nature sketches; "Old Plan-

tation Days" (Dodd, Mead), intimate negro yarns by Paul Laurence Dunbar; "The Change of Heart" (Harper), half a dozen gentle love stories; "The Black Chanter" (Macmillan), clever and tender Highland stories by Nimmo Christie; and "The Untilled Field" (Lippincott), some rather powerful stories by George Moore.

Some not-to-be-neglected short stories that have been published in single volumes (Macmillan) are Owen Wister's "Philosophy Four," an altogether merry, boyish Harvard story, written imimitably; "Man Overboard," a clever sea story by Marion Crawford; "Mrs. Pendleton's Four in Hand," a pretty society tale by Gertrude Atherton; and Wm. Stearns Davis' "The Saint of Dragon's Dale," a weird little German story. "Cirello" (Life) is a slight story of musical and artistic people. "The Unwelcome Mrs. Hatch" (Appleton) is a novelization of Mrs. Harrison's play. It has some power, and is made vital by the character of the heroine.

STORIES TOLD BY LETTERS.

Three recent novels,—by W. D. Howells, Messrs. Vickar and Collins, and Beulah Marie Dix,—take the form of letters: "Letters Home" (Harper) are letters written to people at home telling of the interesting things that are happening in New York, and, together,



CHARLES MARRIOTT.

making a single complete love story; "A Parish of Two" (Lothrop) are letters which pass between a restless young man who is traveling and an invalid friend in West Braintree, Mass. Both are in love with the same already married woman, but neither recognizes the lady in the other's letters until the book has been written. The contrast of the two characters,—one restless, active, healthy; the other, an invalid and a resigned philosopher,—makes a varied interest. "Blount of Breckinhow" (Macmillan) is a scourging tale of nineteenth-century England, told by letters between the Rowlestones, the Carewes, and James Blount.

HUMOROUS STORIES.

Very little real humor has appeared during the last months. "Sinful Peck" (Harper), which has something of the quality of W. W. Jacobs, and is infinitely more flexible than anything Morgan Robertson has done before; "The Captain's Tollgate" (Appleton), a posthumous novel by Frank R. Stockton, with the author's

quaint and mellow humor abundant; and "The Brazen Calf" (Dodd, Mead), a society satire by James L. Ford, are the best examples. Miss Lillian Bell's "Dowager Duchess and the American Girl" (Harper) and Mr. Van Zile's "A Duke and His Double" (Holt) are both about royalty folk, and have consciously or unconsciously considerable humor.



ALFRED HENRY LEWIS.

OTHER BOOKS OF THE SEASON.

BIOGRAPHY AND MEMOIRS.

THE important place held by biography among the books of the present season is especially notable. Not only is Mr. Morley's "Life of Gladstone" distinctly the "book of the month" in England, and to a great extent in America as well, but in the United States there are at the present moment at least half a dozen biographies of statesmen, soldiers, and literary men claiming the attention of the reading public. One of the most interesting of these new enterprises in the field of biographical writing is Mr. Thomas E. Watson's volume on the "Life and Times of Thomas Jefferson" (Appleton). This book demands notice not merely because its author has a vivacious style and positive convictions, but even more because it is a characterization of the first and greatest of our Southern statesmen by a man of Southern birth and breeding. Mr. Watson alludes in his preface to the fact that by far the greater number of books treating of American history and biography have been written by Northern men. He complains not without justice that many

of the histories of our country are histories of New England rather than of the nation. It may very well be that if historical writing had been attempted to any great extent by Southern men in the early days of the Republic, the results would have revealed provincialisms to an even greater degree than do the works of our New England authors. Nevertheless, Mr. Watson is entirely right in his contention that the South should be better represented in our histories. Any Northern man may certainly read with interest and profit what Mr. Watson has to say concerning that man among the founders of our national government who has always more than any other typified the spirit of American democracy.

A delightful volume of reminiscences entitled "My Own Story" has been written by John Townsend Trowbridge, the story writer and poet (Houghton, Mifflin & Co.). Those among our readers,—and they are many, we are sure,—who have been familiar from their youth up with the writings of Mr. Trowbridge in such publications as *The Youth's Companion* and *Our Young Folks*, not to speak of his more serious efforts in the

dignified pages of the *Atlantic Monthly*, will take especial pleasure in reading the autobiography of this genial American writer. Mr. Trowbridge was born in Monroe County, New York, in 1827, his parents being pioneer settlers of that region, and he was brought up on a backwoods farm. After attending the primitive district school of those days, he began by himself, at the age of fourteen, the study of French and Latin, and became an eager reader of Byron, Scott, Shakespeare,



JOHN TOWNSEND TROWBRIDGE.

Burns, and other writers. Mr. Trowbridge began to write verses at thirteen, and to print them at sixteen in a Rochester newspaper. Leaving home after his father's death, he attended a classical school for one term, and in 1845 went to Illinois, where he taught a country school in the winter, and two years later came to New York and began to write for the press. The next year he went to Boston, and soon became known as a writer of tales and sketches. For fifty years, Mr. Trowbridge was a contributor to story papers and the author of a large number of popular poems and stories. His book abounds in reminiscences of Walt Whitman, Father Taylor, Emerson, Longfellow, and other men of letters.

It seems strange, indeed, that the world has had to wait so many years for a complete and authentic account of Dr. Howe's famous experiments with Laura Bridgman which resulted in the first case of successful instruction of a child who was blind as well as deaf-mute. Such an account is now given to the public by Dr. Howe's daughters, Maud Howe and Florence Howe Hall, in a volume entitled "Laura Bridgman, Dr. Howe's Famous Pupil, and What He Taught Her" (Boston: Little, Brown & Co.). Dr. Howe himself died in 1876, after having more than once expressed a determination to write a full account of these experiments; but he was absorbed in other work and found no time for the task. It is announced that this volume will be followed in due time by the earlier adventures and journals of Howe, which another daughter, Mrs. Richards, is editing, and eventually, it is hoped, by the

later and more public life of Dr. Howe. As is well known, many blind deaf-mutes, such as Helen Keller, have been benefited by the system of education which Dr. Howe devised for Laura Bridgman. The records of his experiments are of the highest scientific and educational value.

Anthony Wayne, the Revolutionary general who is known more commonly as "Mad Anthony," is the subject of a memoir in the "Historic Lives" series (Appleton), by John R. Spears. General Wayne's brilliant achievement at Stony Point, and his later career as an Indian fighter in the West, have made his name familiar to successive generations of American schoolboys.

A predestined writer of memoirs was the late M. de Blowitz, the Paris correspondent of the *London Times*, and the volume recently published (Doubleday, Page & Co.), giving the recollections of this extraordinary adventurer and diplomat among journalists, is in no sense a disappointment to those who are familiar with its author's remarkable career. His book is mainly occupied with the hitherto unpublished history of Europe for the past thirty years. Especially interesting is the chapter which recounts the author's interview with the Sultan in 1883.

In the "Great Commanders" series (Appleton), Mr. James Russell Solley, formerly Assistant Secretary of the Navy, writes the life of "Admiral Porter." This is the first time that the record of Admiral Porter's life has been given to the public. It is based upon official documents and correspondence, together with the published narratives of officers who took part in the Civil War. The Porter family had followed the sea for a hundred years before the admiral was born. The admiral's grandfather served as commander of a privateer in the Revolutionary War. His father, of the same name, was the famous Commodore Porter of the War of 1812. The admiral's own distinguished services in

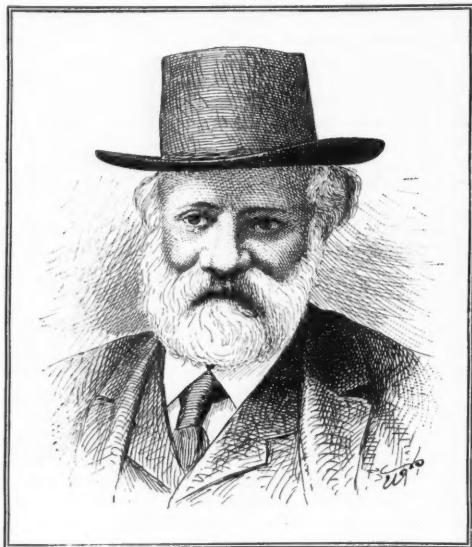


THE LATE ADMIRAL PORTER.

our Civil War are matters of familiar history. Mr. Solley has done a thorough and altogether creditable piece of work.

The life of "Theodore Leschetizky," the greatest of living piano teachers, as written by the Countess Poetcka, has been translated into English by Miss Gene-

vieve Seymour Lincoln (Century Company). Not a few American pianists have been numbered among Leschetizky's pupils in Vienna, and he became famous years ago as the teacher of Paderewski.



THEODORE LESCHETIZKY.

BOOKS OF TRAVEL, DESCRIPTION, AND EXPLORATION.

In "The Land of the Heather," written and illustrated by Clifton Johnson (Macmillan), Scotland is described as some portions of England, Ireland, and France have been described in earlier volumes by the same author. Mr. Johnson's text is not less illuminating than his pictures, and to the stay-at-home as well as to the would-be traveler the combination of text and pictures offers much that is both instructive and pleasing.

"Grindelwald," by Daniel P. Rhodes, is avowedly a "pleasure book." The author has obtained his practical information about Grindelwald through observation and by talks with the Oberländer themselves. The present volume is mainly an answer to a series of questions about the region put by friends of the author. Needless to say, a great amount of this information is beyond the range of the ordinary guide-book literature. The book is beautifully illustrated from half-tone plates.

"To California and Back," by C. A. Higgins and Charles A. Keeler (Doubleday, Page & Co.), is a description of the Southern journey through New Mexico and Arizona, by way of the Grand Canyon, to southern California, and back through the central States. It is full of practical information to the intending traveler, particularly in regard to side trips and the prices of accommodations.

"Gardens of the Caribbees," in the "Travel Lovers' Library" (Boston: L. C. Page & Co.), is a series of sketches of a cruise to the West Indies and the Spanish Main by Mrs. Ida M. H. Starr. In the selection of material the writer has given the preference to matters of distinctly human interest, and as a contribution to our

knowledge of the various native types her writing has a special value. The work is in two volumes, and is beautifully illustrated from photographs.

"A Handbook of Modern Japan," by Ernest W. Clements (Chicago: A. C. McClurg & Co.), is a survey of Japan as it is rather than as it was. There are chapters on "Industrial Japan;" "Travel, Transportation, Commerce;" "People, Houses, Food, Dress;" "Manners and Customs;" "Constitutional Imperialism;" "Local Self-Government;" "Japan as a World Power;" "The New Woman in Japan;" "Language and Literature," "Education," and various other topics which will appeal especially to the intelligent American reader who desires to get into closer touch with the Mikado's empire.

"Central Europe" is a new volume in Appleton's "World Series," written by Prof. Joseph Partsch, of the University of Breslau, and translated by Miss Clementina Black. Although the author's original text has been somewhat abbreviated, the volume as now presented contains a remarkably clear and accurate description of the physical features, climate, peoples, and political and economic geography of central Europe. The diagrams and maps employed in the work are of special excellence.

"Explorations in Bible Lands During the Nineteenth Century," by Prof. Herman V. Hilprecht (Philadelphia: A. J. Holman & Co.), is a one-volume sketch intended to convey to the intelligent English reading public a clear conception of the gradual resurrection of the principal ancient nations of western Asia and Egypt. This subject is now for the first time presented in a systematic but popular form. To attempt to bring



PROF. HERMAN V. HILPRECHT.

the materials within the compass of a single volume must have been an appalling undertaking, but we have at least the assurance that the volume before us is the work of a scholar and explorer of no mean achievements, and the work throughout is permeated by the enthusiasm of the author.

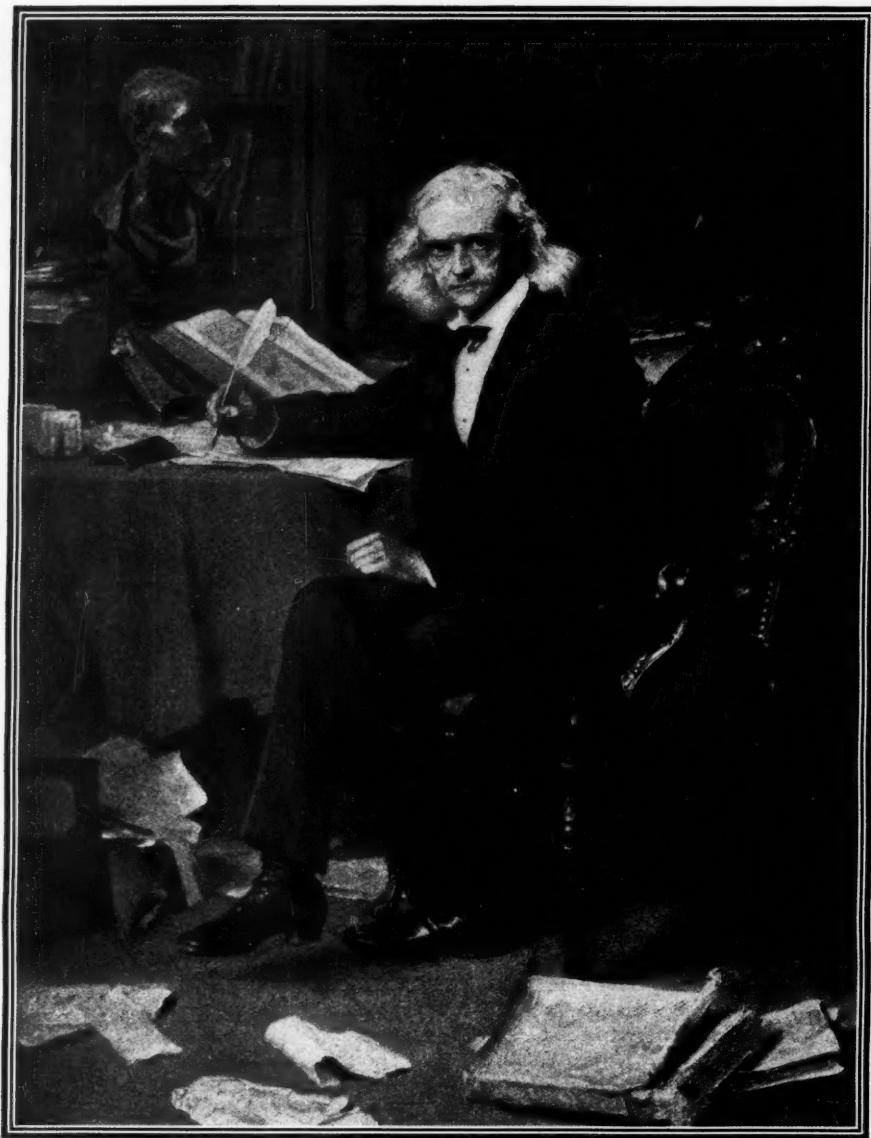
THE AMERICAN MONTHLY REVIEW OF REVIEWS.

EDITED BY ALBERT SHAW.

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THE LATE DR. THEODOR MOMMSEN.

Theodor Mommsen, regarded by many as the greatest historian of his time, was born in Schleswig, in 1817. After some years of study at the University of Kiel and of travel in Italy and France, he was called to a professorship of law at Leipsic, but was soon removed from that position for political reasons. Subsequently he held professorships of Roman law at Zurich and Breslau, and from 1858 to the day of his death (November 1, 1903), he was professor of ancient history at the University of Berlin. In the field of authorship, Mommsen's masterpiece was his monumental "Roman History," but his other contributions to classical learning were almost numberless. In the collection of Latin inscriptions, Mommsen had no peer. The "Corpus Inscriptionum Latinarum" was his creation. In politics, Mommsen was an advanced Liberal, and, while a member of the Landtag, a bitter opponent of Bismarck.